IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO

UNITED STATES OF AMERICA, STATE OF OHIO, EX REL. RICHARD CORDRAY OHIO ATTORNEY GENERAL, Plaintiffs, v. INEOS ABS (USA) CORPORATION, LANXESS CORPORATION, Defendants.	)	Civil Action No. 1:09-CV-545

REVISED CONSENT DECREE

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WHEREAS, Plaintiffs, United States of America, on behalf of the United States Environmental Protection Agency ("U.S. EPA"), and the State of Ohio ("State"), on behalf of the Ohio Environmental Protection Agency ("Ohio EPA"), have filed a Complaint in this action concurrently with this Consent Decree, alleging that Defendants LANXESS Corporation ("LANXESS") and INEOS ABS (USA) Corporation ("INEOS") (together the "Defendants"), violated Sections 110, 112, and 502 of the Clean Air Act ("CAA"), 42 U.S.C. §§ 7410, 7412, and 7661a, and implementing regulations; Section 103(a) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9603(a); Sections 304(a) and (b) of the Emergency Planning and Community Right-To-Know Act ("EPCRA"), 42 U.S.C. §§ 11004(a) and (b); and analogous State laws including Chapters 3704 and 3750 of the Ohio Revised Code ("R.C.") and the rules adopted thereunder;

WHEREAS, the Complaint against Defendants alleges violations of the above statutes and implementing regulations at LANXESS' former and INEOS' current Addyston, Ohio chemical manufacturing facility (the "Facility");

WHEREAS, the Facility manufactures acrylonitrile, butadiene, and styrene ("ABS"), styrene and acrylonitrile ("SAN"), and other plastics and resins;

WHEREAS, the purpose of this Consent Decree is to ensure compliance with applicable environmental laws and regulations and resolve alleged violations at the Addyston Facility;

WHEREAS, LANXESS and INEOS have waived all applicable federal or State requirements of statutory notice of the alleged violations;

WHEREAS, Defendants do not admit any liability to the United States or the State of Ohio arising out of the acts or omissions alleged in the Complaint;

WHEREAS, this Consent Decree resolves all violations alleged in the Complaint as set forth in Section XII (Effect of Settlement). Nothing in the Complaint, nor this Consent Decree, nor in the execution and implementation of this Consent Decree, shall be treated as an admission of any violation of the CAA, CERCLA, or EPCRA, or their implementing regulations, or any State or local equivalent act or implementing regulations cited herein in any litigation or forum whatsoever, except that the terms of this Consent Decree, and/or Defendants' failure to comply with the terms and conditions thereof may be used by the United States or the State in any action or dispute resolution proceeding to enforce the terms of this Consent Decree or as otherwise permitted by law;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation between the Parties, and that this Consent Decree is fair, reasonable, and in the public interest;

WHEREAS, Defendants have implemented a series of acrylonitrile and 1,3-butadiene fugitive emission abatement projects at the Facility over approximately the last three years, including, but not limited to the following: installation of covers on the wastewater treatment tanks to collect and treat fugitive emissions of acrylonitrile and 1,3-butadiene at the wastewater treatment plant; upgrades to the thermal oxidizer; upgrades in the P001 process to eliminate fugitive 1,3-butadiene emissions through the installation of covers on open trenches; installation of a washwater collection tank for kettle cleanings; relief valve upgrades and piping changes; and installation of a cover on the Flare's sump drain; and

WHEREAS, during that same period of time, Defendants also completed the following projects at the Facility's Flare: installation of a containment tank and seal tank to improve the capture of 1,3-butadiene emissions and control the flow of these emissions to the Flare; and

installation of flare monitoring instruments to continuously measure operating parameters of the vent stream going to the Flare and implementation of control logic to automatically operate the Flare at a set conventional heat content and a steam-to-Vent Gas ratio.

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I, and with the consent of the Parties, IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355; Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Section 109(c) of CERCLA, 42 U.S.C. § 9609(c); and Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3); and over the Parties. Venue lies in this District pursuant to 28 U.S.C. §§ 1391(b) and (c) and 1395(a); Section 113(b) of the CAA, 42 U.S.C. § 7413(b); Sections 109(c) and 113 of CERCLA, 42 U.S.C. §§ 9609(c) and 9613; and Section 325(b)(3) of EPCRA, 42 U.S.C. § 11045(b)(3), because the violations alleged in the Complaint are alleged to have occurred in, and Defendants have conducted and/or currently conduct business in, this judicial district.

2. For purposes of this Decree, or any action to enforce this Decree, U.S. EPA, the State of Ohio, and Defendants consent to the Court's jurisdiction over this Decree or such action and over Defendants, and consent to venue in this judicial district. This Court has supplemental jurisdiction under 28 U.S.C. § 1367 over the State law claims asserted by the State of Ohio under Chapters 3704 and 3750 of the R.C. and rules adopted thereunder.

II. APPLICABILITY

3. The obligations of this Consent Decree apply to and are binding upon the United States and the State of Ohio, and upon Defendants and any successors, assigns, or other entities or persons otherwise bound by law.

4. No transfer of ownership or operation of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve INEOS of its obligation to ensure that the terms of the Decree are implemented, unless (1) the transferee agrees in writing to undertake the obligations required by Section VI (Compliance Requirements) and Appendix A of this Decree and to be substituted for INEOS as a Party under the Decree and thus be bound by the terms thereof; and (2) the United States, after consultation with the State of Ohio, and after receiving information sufficient to demonstrate that the transferee has the technical and financial means to comply with the applicable obligations of this Consent Decree, consents to relieve INEOS of its obligations.

5. INEOS shall provide a copy of relevant portions of this Consent Decree to all officers, employees, and agents whose duties might reasonably include responsibility for compliance with any provision of this Decree, as well as a representative of any contractor retained to perform work required under this Consent Decree. In any action to enforce this Consent Decree, Defendants shall not raise as a defense the failure by any of their officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

6. In the event that INEOS determines that it will permanently discontinue the operation of the Facility while this Consent Decree is in effect, INEOS shall notify the United States and the State, in accordance with Section XIV (Notices) in writing at least thirty (30) days

prior to INEOS ceasing such operations. The notification shall not take the place of any responsibility INEOS may have to notify U.S. EPA or Ohio EPA of the closure of the operations that may be required by any permit or federal or State law. INEOS will be relieved of its obligation to continue the performance of the requirements set forth in Section VI (Compliance Requirements) through and including Section VII (Reporting Requirements) and Appendix A of this Consent Decree as of the date operations by INEOS are permanently ceased at the Facility. However, Defendants shall be required to pay the civil penalty set forth in Section IV (Civil Penalty) and stipulated penalties as set forth in Section VIII (Stipulated Penalties) of this Consent Decree, and complete the requirements set forth in all other Paragraphs of this Consent Decree. Defendants' performance of the requirements under this Consent Decree does not relieve Defendants from the requirement to comply with any federal or State laws or regulations applicable upon the cessation of operations at the Facility.

7. Should INEOS decide to restart operations at the Facility, INEOS shall notify the United States and State in writing of its intent to restart operations at least ten (10) days prior to restarting operations at the Facility. In the event that INEOS restarts operations at the Facility, INEOS shall, within thirty (30) days of resuming operations of individual emission sources covered in this Consent Decree, come into compliance with the terms of this Consent Decree pertaining to such emission sources, or be subject to stipulated penalties as set forth in Section VIII (Stipulated Penalties).

III. DEFINITIONS

8. Except as otherwise provided in this Consent Decree, definitions for the terms presented herein shall be incorporated from the following statutes and their corresponding rules and regulations: CAA, 42 U.S.C. § 7401; EPCRA, 42 U.S.C. § 11001 *et seq.*; CERCLA, as

amended, 42 U.S.C. § 9601 *et seq.*; and Chapters 3704 and 3750 of the R.C. Whenever the terms set forth below are used in this Consent Decree, the following definitions shall apply:

a. "Complaint" shall mean the Complaint filed by the United States and the State of Ohio in this action;

b. "Consent Decree" or "Decree" shall mean this Decree and Appendix A attached hereto. In the event of conflict between this Consent Decree and Appendix A, this Consent Decree shall control;

c. "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last Day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

d. "Defendants" shall mean INEOS ABS (USA) Corporation and LANXESS Corporation;

e. "Director" shall be defined as the Director of the Ohio Environmental Protection Agency;

f. "U.S. EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;

g. "Effective Date" shall have the definition provided in Section XV (Effective Date);

h. "Facility" or "Addyston Facility" shall mean INEOS' current and LANXESS' former chemical manufacturing facility located in Addyston, Ohio;

i. "Hamilton County" shall mean the Hamilton County Department of Environmental Services;

j. "Paragraph" shall mean a portion of this Decree identified by an arabic numeral;

k. "Parties" shall mean the United States, the State of Ohio, and Defendants;

l. "R.C." shall mean the Ohio Revised Code;

m. "Passive FTIR" shall mean Passive Fourier Transform Infrared Spectroscopy, a method to measure flare emissions of carbon dioxide (CO_2), carbon monoxide (CO), and total hydrocarbons non-intrusively at a distance from the flare;

n. "PTI" shall mean Permit to Install;

o. "Section" shall mean a portion of this Decree identified by a Roman numeral;

p. "SERC" shall be defined as the Ohio State Emergency Response Commission;

q. "State" or "Ohio" shall mean the State of Ohio, acting on behalf of Ohio EPA and the Hamilton County Department of Environmental Services;

r. "United States" shall mean the United States of America, acting on behalf of U.S. EPA;

s. "Ohio EPA" shall mean the Ohio Environmental Protection Agency and any successor departments or agencies of the State;

t. "LANXESS" shall mean LANXESS Corporation;

u. "INEOS" shall mean INEOS ABS (USA) Corporation;

v. "Block Average," when determining heating value averages shall be expressed as BTU/scf, and steam-to-Vent Gas ratio averages shall be calculated in accordance with the following procedure: (1) for any instance in which the 1,3-butadiene flow is zero over a

five-minute period, or constitutes a "no flow" five-minute average under Paragraph 20(j) of this Consent Decree, that five-minute average heating value shall be assigned a value of zero; (2) beginning at 12:01 AM of each calendar month, add the first twelve, non-zero, five-minute average heating values; (3) divide the total of this sum by 12; and (4) repeat this process, beginning with the 13th, non-zero, five-minute average, to calculate the average for each subsequent group or "block" of twelve, non-zero, five-minute periods;

w. "Spill Release/Reporting Policy" shall mean INEOS' written standard operating procedures for complying with the requirements of Section 103 of CERCLA, 42 U.S.C. § 9603, and Sections 304 and 313 of EPCRA, 42 U.S.C. §§ 11004 and 11023, as revised in accordance with the requirements of Section VI (Compliance Requirements) of the Consent Decree;

x. "P001 Process" shall mean the process unit identified as ABS # 1 POLY ("P001") in the Title V Permit, a batch emulsion polymerization process for ABS (predominant product), SAN, and ASA. The P001 Process includes three kettles identified in the Title V Permit as C KT, D KT, and E KT and associated components identified in the Title V Permit as C PMX, C CLR, C930 HT, D PMX, D CLR, D930 HT, E PMX, and E HT. For purposes of this Consent Decree, the "P001 Process" components and associated vents subject to requirements under Section VI (Compliance Requirements) include only those vents controlled by the Flare, which are C CLR, C930 HT, D CLR, C KT, D KT, and D930 HT, and exclude the vents controlled by a boiler, which are C PMX, D PMX, E PMX, E KT, and/or E HT. In the event that the Addyston Facility modifies its process so that vents from C PMX, D PMX, E PMX, E KT, or E HT rely upon the Flare for emission control, such components and associated vents shall be

included within the meaning of "P001 Process" subject to the requirements set forth in Section VI (Compliance Requirements);

y. "Flare" shall mean the flare emission control device the Addyston Facility operates to control process emissions from, among other things, the P001 Process, to meet the requirements of the Clean Air Act, Title V Permit, and all other applicable federal, State, and local permits;

z. "Title V Permit" shall mean air pollution control permit No. 14-31-01-0054 issued by Ohio EPA relating to the Facility, as it may from time to time be amended, modified, or renewed, or subsequent approved permits;

aa. "Vent Gas" shall be defined as the organic material, nitrogen, and any other gases that flow from the P001 Process, nitrogen added as purge gas, and any other gases and vapors added to the Flare system prior to the tip;

bb. "Flare Gas" shall be defined as all gases and vapors present just after the exit from the Flare tip, not including entrained air, and consist of the sum of the organic material, nitrogen, and any other gases added to the vent gas collection system, natural gas added as supplemental fuel, nitrogen added as purge gas, natural gas flowing to the Flare's pilots, and the steam added at the Flare tip;

cc. "Net Heating Value" shall mean the Lower Heating Value, not the Higher Heating Value;

dd. "Net Heating Value of the Flare Gas" or "NHVFG" shall mean the sum of the amount of each combustible component in the Flare Gas multiplied by its net heat of combustion, divided by the volume of all gases and vapors in the Flare Gas. The enthalpy of the steam may be added to the numerator in an amount that equals the specific heat of the steam

multiplied by the difference between the temperature of the steam and the temperature of the Vent Gas; and

ee. "Steam Contribution Factor" shall be used to account for the fact that at low Vent Gas momentum, depending upon the momentum of the ambient air (wind), not all steam enters the Flare Gas just after the exit of the Flare tip. The Steam Contribution Factor shall be incorporated into the NHVFG and steam-to-Vent Gas ratio calculations when a certain momentum ratio (momentum of Vent Gas over momentum of wind) or exit velocity is reached, and shall result in only a portion of the total steam supplied to the tip being included in the NHVFG equation, applied both to the steam enthalpy in the numerator and steam volume in the denominator. Based upon Facility-specific process data and meteorological data that INEOS has submitted to U.S. EPA and Ohio EPA related to the Flare's operation, exit velocity is an appropriate indicator of the flame shape for this Flare, and the steam contribution factor may be applied below an exit velocity of seventy-five (75)-feet/minute when calculating the NHVFG and steam-to-Vent Gas ratio in accordance with this Consent Decree. In the Flare Monitoring Instruments SOP submitted under Paragraph 21, INEOS shall specify details as to the method for using the Steam Contribution Factor in calculating the NHVFG. INEOS may propose an exit velocity number other than seventy-five (75)-feet/minute in the Flare Monitoring Instruments SOP referenced in Paragraph 21 that will be submitted for approval pursuant to Paragraph 13. Should INEOS propose an alternate exit velocity number, it shall provide to Ohio EPA and U.S. EPA supporting rationale for the proposed number, including relevant operational and meteorological data.

IV. CIVIL PENALTY

9. Within thirty (30) Days after the Effective Date of this Consent Decree, Defendants shall pay the sum of $3.1 million as a civil penalty to the United States, the State of Ohio, and Hamilton County, of which $1,550,000 will be paid to the United States, $1,167,500 to the State of Ohio, and $382,500 to Hamilton County, as set forth in this Section. The obligations of Defendants to pay the civil penalty are joint and several. Of the total civil penalty paid to the United States, $70,000 of that amount shall be paid to the EPA Hazardous Substances Superfund.

10. Within thirty (30) Days after the Effective Date of this Consent Decree, Defendants shall pay the civil penalty due to the United States by FedWire Electronic Funds Transfer ("EFT") to the U.S. Department of Justice in accordance with written instructions to be provided to Defendants, following lodging of the Consent Decree, by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio, 221 East Fourth Street Suite 400, Cincinnati, Ohio, 45202. At the time of payment, Defendants shall send a copy of the EFT authorization form and the EFT transaction record, together with a transmittal letter, which shall state that the payment is for the civil penalty owed pursuant to the Consent Decree in *United States, et al. v. INEOS ABS (USA) Corporation, et al.*, and shall reference the civil action number and DOJ case number 90-5-2-1-09264, to the United States in accordance with Section XIV of this Decree (Notices); by (1) email to acctsreceivable.CINWD@epa.gov; and (2) by mail to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

11. Defendants shall not deduct any penalties paid under this Consent Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating their federal, State, or local income taxes.

12. Within thirty (30) days of the Effective Date of the Consent Decree, Defendants shall pay the civil penalty due to the State of Ohio by delivering five certified checks to the Plaintiff, % Karen Pierson or her successor, Paralegal, Office of the Attorney General of Ohio, Environmental Enforcement Section, 30 East Broad Street, 25th Floor, Columbus, Ohio 43215, payable to the order of "Treasurer, State of Ohio" as follows:

A. In lieu of approximately 19.7% of the civil penalty, make a contribution in the amount of two hundred twenty-nine thousand five hundred dollars ($229,500.00) as a State supplemental environmental project to the Clean Diesel School Bus Program (Fund 5CD0). This program has been established by the Director of Ohio EPA ("Director") for the purpose of installing, in accordance with Ohio EPA's guidelines, diesel particulate filters and other controls for school buses operated by school districts in the State of Ohio. Money in the Fund shall be made available to school districts in accordance with grants established by the Director. The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 304160" and a notation that such monies are to be deposited into Fund 5CD0 established by Ohio Environmental Protection Agency for the Clean Diesel School Bus Program.

B. Twenty thousand dollars ($20,000.00) to the State Emergency Planning and Community Right-To-Know Fund. The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 304160" and a notation that such monies are to be deposited into the EPCRA Fund established by Ohio Environmental Protection Agency.

C. Two hundred fifty-six thousand dollars ($256,000.00) to the Ohio EPA Division of Air Pollution Control. The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 304160" and a notation that such monies are to be deposited into an account for the Division of Air Pollution Control established by Ohio Environmental Protection Agency.

D. Six hundred twelve thousand dollars ($612,000.00) to the Ohio Environmental Education Fund ("OEEF"). The memorandum portion of the check, or some other prominent location on the transmittal letter or documentation, shall include a reference to "A.G. EAGO No. 304160" and a notation that such monies are to be deposited into the OEEF Fund established by Ohio Environmental Protection Agency.

E. Fifty thousand dollars ($50,000.00) to fund the Ohio Department of Natural Resources, Division of Forestry, Urban Forestry Grant Program in order to provide for tree planting and ash tree removal (due to emerald ash borer) projects in and around Addyston, Ohio; the memorandum portion of the check, or some other prominent location on the transmittal letter or

documentation, shall include a reference to "A.G. EAGO No. 363812" and specify that such monies are to be deposited into the fund established by the Ohio Department of Natural Resources for the Urban Forestry Grant Program (Fund 5K10).

12a. Within thirty (30) Days after the Effective Date of this Consent Decree, Defendants shall pay the civil penalty due to Hamilton County. Payment to Hamilton County shall be in the form of a certified or cashier's check made payable to "Treasurer of Hamilton County" and shall be sent to the Kerri Castlen, Hamilton County Department of Environmental Services, 250 William Howard Taft Rd., Cincinnati, OH 45219.

V. APPROVAL OF SUBMISSIONS

13. Approval of Deliverables. After review of any plan, report, or other item that is required to be submitted for approval pursuant to this Consent Decree, U.S. EPA, after consultation with the State, shall in writing: a) approve the submission; b) approve the submission upon specified conditions; c) approve part of the submission and disapprove the remainder; or d) disapprove the submission.

14. If the submission is approved pursuant to Paragraph 13.a, INEOS shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 13.b or c, INEOS shall, upon written direction from U.S. EPA, take all actions required by the approved plan, report, or other item that U.S. EPA, after consultation with the State, determines are technically severable

from any disapproved portions, subject to INEOS' right to dispute only the specified conditions or the disapproved portions, under Section X of this Decree (Dispute Resolution).

15. If the submission is disapproved in whole or in part pursuant to Paragraph 13.c or d, INEOS shall, within forty-five (45) Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other item, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the resubmission is approved in whole or in part, INEOS shall proceed in accordance with the preceding Paragraph provided, however, that INEOS shall note specified conditions or disapproved portions that INEOS has exercised its right to dispute under Section X of this Consent Decree (Dispute Resolution).

16. Any stipulated penalties applicable to the original submission, as provided in Section VIII of this Decree (Stipulated Penalties), shall accrue during the forty-five (45)-day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of INEOS' obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission; and further provided that stipulated penalties shall not be payable in connection with specified conditions or disapproved portions that are successfully challenged by INEOS under Section X of this Decree (Dispute Resolution).

17. If a resubmitted plan, report, or other item, or portion thereof, is disapproved in whole or in part, U.S. EPA, after consultation with the State, may again require INEOS to correct any deficiencies, in accordance with the preceding Paragraphs, or may itself correct any

deficiencies, subject to INEOS' right to invoke Dispute Resolution and the right of U.S. EPA and the State to seek stipulated penalties as provided in the preceding Paragraphs.

VI. COMPLIANCE REQUIREMENTS

18. INEOS shall comply with the following requirements at all times as of the Effective Date of the Consent Decree:

a. The steam added to the Flare shall not exceed a steam-to-Vent Gas ratio of 3.6 to 1 (3.6:1) lbs steam/lb Vent Gas sent to the Flare, determined just prior to combustion at the tip of the Flare as a 1-hour Block Average.

b. The Net Heating Value of Vent Gas combusted by the Flare shall meet at least 385 BTU/scf as a 1-hour Block Average provided that INEOS is in compliance with the requirements of Paragraph 24(a)-(c). However, in the event U.S. EPA has not determined a minimum NHVFG pursuant to Paragraph 24(d) within six (6) months of the Effective Date of the Consent Decree, the 200 BTU/scf requirement set forth in Paragraph 19 shall be effective at all times until such determination is made.

19. 200 BTU/scf Requirement.

a. During the first six months after the Effective Date of the Consent Decree, INEOS shall comply with a NHVFG of 200 BTU/scf if the conditions of Paragraph 24(a), (b) or (c) are not met. This requirement shall apply as set forth herein notwithstanding INEOS' disagreement that the 200 BTU/scf NHVFG as a 1-hour Block Average is a technically appropriate heat content for assuring a 99% control efficiency as required by the Facility's Title V Permit.

i. The heat content of the Flare Gas just after the exit of the flare tip shall not be less than 200 BTU/scf as a 1-hour Block Average.

ii. At all times after 6 months following the Effective Date of the Consent Decree, INEOS shall meet the requirements of Paragraph 19.a.i, unless and until U.S. EPA has determined a new NHVFG value in accord with Paragraph 24(d); provided, however, that stipulated penalties for failure to meet the requirements of Paragraph 19(a)(i) do not apply during this interim period unless INEOS has failed to comply with Paragraphs 24(a), (b) or (c). At all times beginning thirty (30) days after U.S. EPA has determined a new NHVFG value in accord with Paragraph 24, INEOS shall meet the new value.

20. Flare Monitoring Requirements. Within twenty (20) Days of the Effective Date of this Consent Decree, INEOS shall operate and maintain instruments at all times when process emissions are vented from the P001 Process that comply with the following requirements ("Flare Monitoring Instruments"):

a. directly and continuously measure, calculate, and record (in lbs/hr) the amount of Vent Gas sent to the Flare as five-minute averages;

b. directly and continuously measure and record (in lbs/hr) the amount of 1,3-butadiene in the Vent Gas sent to the Flare as five-minute averages;

c. directly and continuously measure and record (in lbs/hr) the amount of steam sent to the Flare as five-minute averages;

d. directly and continuously measure, calculate, and record (in BTU/scf) the Net Heating Value of the Vent Gas sent to the Flare as five-minute averages;

e. directly and continuously measure and record the amount of natural gas in the vent stream sent to the Flare (in scf) and report the amount of natural gas sent to the Pilots (in scf) as five-minute averages;

f. calculate and record (in lbs steam/lb Vent Gas) the average steam-to-Vent Gas ratio at the Flare as five-minute averages and 1-hour Block Averages;

g. directly and continuously measure, calculate, and record (in BTU/scf), the NHVFG, as five-minute averages and 1-hour Block Averages;

h. implement control logic such that the INEOS computerized control system, when in automatic mode, strives to achieve a steam-to-Vent Gas ratio of 0.9:1 lbs steam/lb Vent Gas combusted by the Flare. During startup, shutdown, or malfunction as defined pursuant to 40 C.F.R. Part 63, or repair, system breakdown, or calibration, INEOS may vary the steam addition rate manually for the purpose of controlling the amount of smoke from the Flare tip in accordance with requirements under the Title V Permit. During these periods, but while the flare monitoring instruments are still operational, INEOS must still maintain a 1-hour Block Average steam-to-Vent Gas ratio of no greater than 3.6:1 lbs steam/lb Vent Gas combusted by the Flare as required by Paragraph 18.a and the 1-hour Block Average for NHVFG as required by Paragraphs 18.b, 19 and/or 24, whichever is applicable, except as necessary to correct visible emissions that occurred during that 1-hour period. In the event manual control is used to increase steam to address visible emissions, the duration of such manual control shall be no longer than 15 continuous minutes. INEOS shall minimize periods of repair, breakdown and calibration;

i. automatically adjust and control the natural gas addition rate to the Flare to maintain the heat content value of the Vent Gas sent to the Flare at or above 300 BTU/scf as a five-minute average; and

j. for purposes of determining compliance under this Consent Decree any five (5)-minute period in which the minimum flow of 1,3-butadiene is less than 1.0 lb/hour shall

be considered as "no flow" and any 1-hour Block Average shall not include any five (5)-minute averages for "no flow" conditions.

21. Flare Monitoring Instruments Standard Operating Procedure (SOP). INEOS shall adopt the following new and/or revised Standard Operating Procedure (SOP) for compliance with its Flare Monitoring Requirements pursuant to Paragraph 20 of this Section VI (Compliance Requirements). INEOS shall submit to U.S. EPA and Ohio EPA for approval pursuant to Paragraph 13 of the Consent Decree the SOP described below within thirty (30) Days of the Effective Date of the Consent Decree. Within thirty (30) Days of approval of the SOP pursuant to Paragraph 13 of the Consent Decree, INEOS shall implement the SOP as approved at the Addyston Facility. Failure to adopt and/or failure to follow the SOP shall be subject to stipulated penalties pursuant to Section VIII of the Consent Decree (Stipulated Penalties). The SOP shall include a narrative description of the methods and calculations that INEOS shall use to comply with the flare monitoring requirements set forth in Paragraph 20 of this Consent Decree, including, but not limited to, the equipment INEOS will use, a drawing showing the equipment and its placement relative to the P001 Process and the Flare, and the methodology for determining the parameters set forth in Paragraph 20.

22. INEOS shall operate the Flare Monitoring Instruments to continuously record at five-minute intervals the values required to be recorded under Paragraph 20 at all times process emissions are vented from the P001 Process, except for times of repair, system breakdown, and calibration. INEOS shall also calculate and record the 1-hour Block Averages for the steam-to-Vent Gas ratio specified in Paragraph 18.a, the Net Heating Value of Vent Gas specified in Paragraph 18.b, and NHVFG at all times process emissions are vented from the P001 process. INEOS shall record each Day whether or not the Flare Monitoring Instruments are operating in

accordance with the requirements of this Consent Decree. For each Day the Flare Monitoring Instruments are not operating in accordance with the requirements of this Consent Decree, INEOS shall record the duration of the event, an explanation why the event occurred, and the corrective actions taken, if any. INEOS shall minimize periods of repair, breakdown and calibration.

23. By the 10th day of every month INEOS shall submit to U.S. EPA and Ohio EPA a report pursuant to Section VII (Reporting Requirements) providing all of the data values recorded pursuant to Paragraphs 20 in the previous month in a form that demonstrates whether INEOS has complied with the requirements of Paragraph 18 of the Consent Decree. INEOS shall submit such reports for twelve (12) months following the Effective Date of the Consent Decree, and on a quarterly basis thereafter, by the 15th Day following the end of each calendar quarter.

24. Passive FTIR. INEOS shall perform a Passive FTIR evaluation in accord with the requirements of this Paragraph 24. The Parties agree that the Passive FTIR evaluation pursuant to this Consent Decree will only be used to inform the Director of the Air Enforcement Division's decision in his/her decision to establish the NHVFG pursuant to Paragraph 24(d), and not for any other purpose.

a. No later than August 15, 2009, INEOS shall submit for approval pursuant to Paragraph 13 a work plan to perform the Passive FTIR evaluation on the Flare. It is contemplated that there will be an approved work plan as of the Effective Date of the Consent Decree. INEOS shall perform the Passive FTIR evaluation in accord with the approved work plan and this Paragraph 24.

b. Within sixty (60) Days of the later of the Effective Date of the Consent Decree or U.S. EPA's approval of the work plan, INEOS shall complete the Passive FTIR evaluation in accord with the approved work plan.

c. Within one hundred fifty (150) Days of the later of the Effective Date of the Consent Decree or U.S. EPA's approval of the work plan, INEOS shall submit a report to U.S. EPA and Ohio EPA summarizing the results of the Passive FTIR evaluation. At a minimum, the report shall contain the following:

i. Summary of the results of the Passive FTIR evaluation;

ii. Identification of weather and operational data during evaluation periods; and

iii. The proposed minimum NHVFG standard to take effect following decision by the Director of the Air Enforcement Division in the Office of Enforcement and Compliance Assurance ("Director of Air Enforcement") in accord with this Paragraph.

d. The Director of Air Enforcement, after consultation with Ohio EPA, shall determine the minimum NHVFG and inform INEOS in writing of his/her decision. At all times following thirty (30) days after the Director of Air Enforcement's decision regarding the minimum NHVFG value, INEOS shall meet the NHVFG value determined by the Director of Air Enforcement, subject to dispute resolution pursuant to Section X (Dispute Resolution) of this Consent Decree.

25. P001 Process Evaluation. In the event that the monitoring data at the Meredith Hitchens School for 1,3-butadiene is anything other than "non-detect," INEOS shall conduct an evaluation of the P001 Process ("P001 Process Evaluation").

a. The P001 Process Evaluation shall include a review of the following information which shall be made available upon request to Hamilton County:

i. Ambient data, wind data, production data, and P001 Process operational data.

ii. A determination as to whether any detection of 1,3-butadiene was caused by operational conditions at the P001 Process and, if so, what corrective actions will be taken to prevent similar events.

b. INEOS shall call Hamilton County to discuss the P001 Process Evaluation within fifteen (15) Days after INEOS receives monitoring data indicating anything other than a non-detect value for 1,3-butadiene.

26. Retention of Records. INEOS shall retain records created pursuant to Paragraphs 18 through 25 of this Consent Decree, including raw data values collected pursuant to such Paragraphs, in accordance with Section XI (Information Collection and Retention), and make any such records available to U.S. EPA and Ohio EPA upon request.

27. Acrylonitrile Emissions Control Projects. INEOS shall perform the following projects described in Paragraphs 28 to 31 in accord with this Section VI (Compliance Requirements) of the Consent Decree.

28. Biofilter Project. Within forty-five (45) Days of the Effective Date of the Consent Decree, INEOS shall submit to U.S. EPA and the State for approval pursuant to Paragraph 13 of the Consent Decree a work plan to design, construct, install, and operate a biofilter or substantially similar equipment at the Addyston Facility's wastewater treatment plant to capture and control acrylonitrile emissions from the Addyston Facility's spill tank, west aeration tank, east aeration tank, blend tank, pH tank, lift station, primary DAF tank, floc tank, sludge pit and

the C4 tank ("Biofilter Project"). The Biofilter Project shall include installation of covers on those tanks currently not covered and the lift station to capture all organic compound emissions from the tanks and the lift station, and all of the organic compound emissions from the tanks and lift station shall be vented to the new biofilter for control. The Biofilter Project shall be installed and operated in accordance with the approved work plan and schedule set forth in Paragraph 29. The Biofilter Project shall be operated to achieve and maintain an overall control efficiency of not less than 60% for acrylonitrile emissions. In order to demonstrate compliance with the 60% acrylonitrile control efficiency, INEOS shall develop a test protocol in consultation with the manufacturer of the biofilter. Method 18 of 40 C.F.R. Part 60 Appendix A shall be used to determine acrylonitrile concentrations.

a. INEOS shall work with the manufacturer of the biofilter system to establish key operating parameters and maintenance activities to ensure the ongoing effectiveness of the biofilter system and its ability to meet the 60% control efficiency. Based on the manufacturer's recommendations and the results of the testing required by Paragraph 29, within sixty (60) Days after completion of the required testing, INEOS shall develop and submit for approval pursuant to Paragraph 13 of the Consent Decree written procedures to monitor key operating parameters of the biofilter system and a maintenance plan to be followed. These written procedures and maintenance plan shall include specific process variables to be monitored, the frequency at which they will be monitored, and what operational ranges shall be maintained for the key operating parameters to ensure the optimum ongoing control efficiency for the biofilter. The maintenance plan shall also include specific maintenance activities along with the frequency at which the maintenance activities shall take place. INEOS shall implement

the biofilter protocol as approved by Ohio EPA. Disagreements regarding the approved protocol shall be subject to Section X of this Consent Decree (Dispute Resolution).

b. A report indicating any deviations from operating parameters identified in Paragraph 28(a) above shall be submitted to U.S. EPA and Ohio EPA in writing on a quarterly basis, within thirty (30) Days following the end of each calendar quarter.

29. Biofilter Project Installation Schedule. INEOS shall install and construct the Biofilter Project in accordance with the following schedule:

TASKS	BIOFILTER PROJECT DEADLINE
Submission of work plan to U.S. EPA and Ohio EPA	Within forty-five (45) Days of the Effective Date of the Consent Decree
Issuance of Purchase Orders	Within thirty (30) Days of approval of Work Plan
Initiation of Construction	Within sixty (60) Days of approval of Work Plan
Completion of Construction of Phase I (venting of all tanks except for the West and East Aeration Tanks)	Within six months of the start of construction
Emission Testing	Within ninety (90) Days of completion of construction
Completion of Construction of Phase II (Venting of West and East Aeration Tanks)	Within seven months of completion of construction of Phase I

30. Emissions Unit P035 Scrubber Project: Emissions Unit P035 Scrubber (Facility ID P35 SCBR ST) is currently shut down. Prior to recommencing operation of the Emissions Unit P035 Scrubber, INEOS shall: (1) complete the construction required to tie in the exhaust

from the Emissions Unit P035 Scrubber to the Facility's existing thermal oxidizer, in accordance with Drawing No. 0021-14-M-00011 and Drawing No. 0021-14-M00010, which INEOS submitted to the Hamilton County Department of Environmental Services on November 13, 2009; and (2) INEOS shall submit an application for a Permit to Install for the Emissions Unit P035 Scrubber Project, described in Paragraph 30, pursuant to Paragraph 35 of this Consent Decree. INEOS shall vent all process emissions from the Emissions Unit P035 Scrubber to the thermal oxidizer, which shall have a control efficiency at the thermal oxidizer of at least 98% for organic compounds.

31. The Emissions Unit P035 Scrubber Project shall be installed and operated in accordance with the requirements contained in Paragraphs 30 and the Permit to Install issued for the P035 Emissions Unit Scrubber Project.

32. Main Duct Leak Detection and Repair SOP. Within thirty (30) Days of the Effective Date of the Consent Decree, INEOS shall submit to U.S. EPA and Ohio EPA for approval pursuant to Paragraph 13 a new and/or revised SOP to ensure compliance with the requirements set forth at 40 C.F.R. Part 63, subparts H and JJJ for the Main Duct relating to leak detection and repair.

33. Within thirty (30) Days of approval of the SOP pursuant to Paragraph 13, INEOS shall implement the approved Main Duct SOP at the Facility. The SOP shall include the following requirements:

a. sufficient direct sensory (visible, audible, and olfactory) inspection of all surfaces of the Main Duct within five feet of the Main Duct;

b. inspection and record-keeping requirements, including the portion of the Main Duct located outside the Process Areas; and

c. repair of Main Duct leaks within the required time frames.

Failure to develop or implement the SOP shall subject INEOS to stipulated penalties pursuant to Section VIII (Stipulated Penalties) of this Consent Decree.

34. Enhanced Leak Detection and Repair. In addition to compliance with applicable leak detection and repair program requirements under 40 C.F.R. Part 63, subparts H, JJJ, and FFFF, INEOS shall implement and comply with the requirements of the Enhanced Leak Detection and Repair Plan ("ELP") set forth in Appendix A to this Consent Decree.

35. Permits. Where any compliance obligation under this Section requires INEOS to obtain a federal, State, or local permit or approval, INEOS shall submit timely and complete applications and take all other actions necessary to obtain all such permits or approvals. INEOS may seek relief under the provisions of Section IX of this Consent Decree (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if INEOS has submitted timely and complete applications and has taken all other actions necessary to obtain all such permits or approvals.

36. Incorporating Consent Decree Requirements Into Permits. As soon as practicable, but in no event later than the times set forth in subparagraphs a. and b. below, INEOS shall submit an appropriate application to Ohio EPA to incorporate the specific requirements of the Consent Decree listed in Paragraphs 18 to 24 and 28 to 31 into federally enforceable non-Title V permits, including but not limited to Permits to Install under OAC Rule 3745-31-05(D), whether as new permits or modifications to existing permits, that will ensure that the requirements survive the termination of this Consent Decree. Following submission of the appropriate application, INEOS shall cooperate with Ohio EPA by promptly submitting to Ohio EPA all

information that it seeks in connection with the permit application following its receipt of the application materials. Upon issuance of such permit, or in conjunction with such permitting, or in modifying any existing permit, INEOS shall file an updated Title V Permit renewal application to incorporate the requirements of that permit into the Title V Permit for the Facility. The following requirements of this Consent Decree shall also be incorporated into permits pursuant to this Paragraph 36:

a. Within ninety (90) Days of the completion of testing for the Biofilter Project, and within ninety (90) Days of completion of construction for the Emissions Unit P035 Scrubber Project, if applicable, pursuant to Section VI (Compliance Requirements) INEOS shall file an application to incorporate the requirements relating to the Biofilter Project and Emissions Unit P035 Scrubber Project, if applicable, set forth in or established pursuant to Paragraphs 28 to 31 above.

b. Within ninety (90) Days of the decision by the Director of Air Enforcement pursuant to Paragraph 24(d), INEOS shall file an application to incorporate the requirements relating to the Flare, and the Flare Monitoring Instruments SOP, set forth in Paragraphs 18 through 24.

37. Mechanism for Title V Permit Incorporation. The Parties agree that the incorporation of any requirement of this Consent Decree into the Title V Permit for the Facility will be in accordance with the Ohio EPA Title V permitting rules.

38. The requirements of Section VI (Compliance Requirements) set forth in Paragraphs 18 through 24 and 28 through 31 above shall be enforceable under this Consent Decree and, when these requirements are incorporated into the non-Title V permits applicable to

the Facility and then incorporated into the Facility's Title V Permit, these requirements shall also become enforceable pursuant to such permits.

39. Pursuant to the procedures set forth in Section XIV (Notices), INEOS shall provide U.S. EPA with a copy of each application for a federally enforceable permit necessary to implement the requirements of this Consent Decree that is filed after the Effective Date of this Consent Decree, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any opportunity for public comment. If, as of the Effective Date of this Consent Decree, INEOS has received any permit necessary to implement the requirements of this Consent Decree, then no later than thirty (30) Days after the Effective Date of this Consent Decree, INEOS shall submit copies of such permits to U.S. EPA using the procedures set forth in Section XIV (Notices). U.S. EPA may excuse in writing all or part of the latter submission if copies of such permits have already been submitted to U.S. EPA prior to the Effective Date of this Consent Decree.

40. CERCLA/EPCRA Requirements. INEOS shall comply with the requirements of Section 304 and 313 of EPCRA, 42 U.S.C. §§ 11004 and 11023, Section 103(a) of CERCLA, 42 U.S.C. § 9603, and R.C. 3750.06.

41. Within sixty (60) days of the Effective Date of this Consent Decree, INEOS shall modify its Spill/Release Reporting Policy to incorporate the following provisions:

a. Develop an emergency-release notification form. This form shall include:

- The date and time of the release;
- The chemical(s) involved and the quantity(ies) released;
- Telephone numbers for the National Response Center ("NRC"), the State Emergency Response Commissions ("SERCs") of the state(s)

likely to be affected, the Local Emergency Planning Committees ("LEPCs"), and the local fire department(s) of the area(s) likely to be affected by the release;

- An area on the form to identify when (the dates and times) the following entities are orally notified of a reportable release: the NRC; the Ohio and, if applicable, Indiana and/or Kentucky SERCs and the LEPCs, and the local fire department(s);
- An area on the form to identify the dates that the written follow-up reports are sent to the Ohio and, if applicable, Indiana and/or Kentucky SERCs and the LEPCs; and
- An area on the form to include the date and time when knowledge of a reportable release is obtained by the Facility.

b. Revise the Spill/Release Reporting Policy to include the telephone numbers and names of the contacts at the Indiana and Kentucky SERCs and all potentially impacted LEPCs.

c. Revise the Spill/Release Reporting Policy to require reporting of reportable quantity releases, including during startup, shutdown, and malfunctions, immediately within the meaning of Section 103 of CERLCA, 42 U.S.C. § 9603(a) and Section 304 of EPCRA, 42 U.S.C. § 11004, upon knowledge of exceeding the reportable quantity.

d. Revise the Spill/Release Reporting Policy to require immediate notification to the NRC, the SERCs, the LEPCs, and the local fire department(s) when a malfunction, startup or shutdown occurs and a reportable quantity of any chemicals that are released.

42. For each reportable quantity release of a hazardous substance or extremely hazardous substance, INEOS shall initiate a root cause analysis within forty-eight (48) hours of reporting the release and complete the analysis within ninety-six (96) hours, where practicable, which shall include a description of the event or circumstances which gave rise to the release. Once the root cause analysis of the release has been completed, identified corrective action(s) shall be initiated within one week to limit recurrence of the release. If the root cause analysis cannot be completed within ninety-six (96) hours or the identified corrective action(s) cannot be completed within one month of initiating such corrective action(s), INEOS shall provide notice to U.S. EPA, Ohio EPA, and Hamilton County pursuant to Section XIV (Notices) of the Consent Decree.

43. Within ninety (90) Days of the Effective Date of the Consent Decree, INEOS shall complete a comprehensive internal review of its training procedures to ensure that all personnel involved in carrying out INEOS' responsibilities to report releases are adequately trained to ensure compliance with EPCRA Section 313, CERCLA Section 103, and EPCRA Section 304. INEOS shall identify any deficiencies discovered during this review, and any deficiencies noted in this review shall be corrected and the training procedures updated within one hundred twenty (120) days of the Effective Date of the Consent Decree.

44. Within thirty (30) Days of the Effective Date of the Consent Decree, INEOS shall begin a comprehensive review of its compliance with EPCRA and CERCLA reporting requirements at the Facility to determine:

a. The types and quantities of chemicals stored on site. This evaluation shall include a Material Safety Data Sheet ("MSDS") review at the Addyston Facility. The MSDS review shall determine if any Toxic Release Inventory ("TRI") chemicals are used on site in

quantities greater than the reporting thresholds, and if releases of these chemicals have gone unreported. For any TRI chemicals identified as having been or being used over the reporting thresholds where no reporting has been completed, INEOS shall submit the appropriate TRI forms within ninety (90) Days of knowledge of the violation.

b. INEOS shall also standardize calculation methods to ensure accurate and timely reporting. By each May 31 following the Effective Date of the Consent Decree, the reporting officials from the Addyston Facility shall meet to review the chemicals reported, types and quantities of releases reported, and calculation methods used. Discrepancies in this comparison shall be investigated and inaccuracies shall be corrected prior to filing the TRI reporting forms in July.

c. The internal program review shall also determine:

i. The extent to which the presence of any chemicals identified in Paragraph 44.a and b. above trigger reporting obligations under EPCRA or other federal statutes;

ii. Whether INEOS' procedures for detecting reportable releases under CERCLA Section 103 and EPCRA Section 304 are adequate to ensure timely and accurate reporting; and

iii. Whether INEOS' procedures for calculating thresholds and emissions for purposes of EPCRA 313 are adequate to ensure accurate and timely reporting.

45. Within ninety (90) Days of the Effective Date of the Consent Decree, INEOS shall complete the comprehensive review of its compliance with EPCRA and CERCLA reporting requirements of the Facility as set forth in Paragraph 44 above. The auditors conducting this internal review shall not be part of the Addyston operations. The auditors can be from a different INEOS operation and must be knowledgeable about the Addyston operation. A written report of

the EPCRA/CERCLA review ("EPCRA Report") shall be provided to U.S. EPA and Ohio EPA pursuant to Section XIV (Notices) within one hundred twenty (120) Days of the Effective Date of the Consent Decree.

46. INEOS shall submit the report on the findings of the internal review to James Entzminger, U.S. EPA, 77 West Jackson Boulevard, Chicago, IL 60604.

47. For any TRI chemicals identified as being used over the reportable thresholds where no reporting has occurred, INEOS will submit the appropriate TRI forms within ninety (90) Days of receipt of knowledge of the inadequacy or discrepancy.

48. INEOS shall correct any other inadequacies or discrepancies identified by the EPCRA Report within sixty (60) Days of receipt of the EPCRA Report.

49. Hamilton County is currently monitoring, and expects to continue monitoring, ambient air concentrations of 1,3-butadiene and acrylonitrile at the current rooftop location at Meredith Hitchens Elementary School, 190 Main Street, in Addyston, and/or at any other locations as determined by Hamilton County to best measure the ambient air quality of affected populations. Hamilton County plans to conduct monitoring using the methods in the U.S. EPA publication entitled "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (Second Edition); Compendium Method TO-15, Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters And Analyzed by Gas Chromatography/Mass Spectroscopy (GC/MS)." Hamilton County plans to collect samples on, at least, an every six-Day schedule for twenty-four (24) hours. Provided that Hamilton County continues to conduct such monitoring during the pendency of the Consent Decree, INEOS shall continue to reimburse Hamilton County for costs associated with the analysis of samples collected at the monitoring location at Meredith Hitchens Elementary

School, in a manner required by Hamilton County after a reasonable opportunity for consultation with INEOS.

VII. REPORTING REQUIREMENTS

50. INEOS shall submit the following reports:

a. Within thirty (30) Days after the end of each calendar quarter (i.e., by April 30, July 30, October 30, and January 30) beginning on January 30, 2010, and continuing until termination of this Decree pursuant to Section XVIII (Termination), INEOS shall submit written quarterly reports for the preceding quarter for the LDAR reporting obligations as set forth in Appendix A and the reporting obligations set forth in Paragraph 23. Within thirty (30) Days after the end of the second and fourth calendar quarters after the Effective Date of this Consent Decree, INEOS shall submit written semi-annual reports for all other reporting obligations, except that the reporting requirements set forth in Paragraph 23 shall apply to the items listed in Paragraph 20. Except as specifically provided in Paragraph 23, all such reports shall include the status of any construction or compliance measures under Section VI (Compliance Requirements) and Appendix A of the Consent Decree; completion of milestones; problems encountered or anticipated, together with implemented or proposed solutions; status of permit applications; operation and maintenance; reports to State agencies; and a summary of costs incurred since the previous report.

b. Each report shall also include a description of any noncompliance with the requirements of this Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If INEOS violates, or has reason to believe that it may violate, any requirement of this Consent Decree, INEOS shall notify the United States and the State of such violation and its likely duration, in writing, within

ten (10) working Days of the Day INEOS first becomes aware of the violation, with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, INEOS shall so state in the report. INEOS shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of the cause of the violation, within thirty (30) Days of the Day INEOS becomes aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves INEOS of its obligation to provide the notice required by Section IX of this Consent Decree (Force Majeure).

51. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting INEOS' performance under this Decree, or the performance of the Facility, results in a reportable release of a hazardous substance within the meaning of CERCLA and EPCRA, INEOS shall notify U.S. EPA and the State of Ohio pursuant to Section XIV (Notices) orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after INEOS first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph.

52. All reports shall be submitted to the persons designated in Section XIV of this Consent Decree (Notices).

53. Each report submitted by INEOS under this Section shall be signed by an official of the submitting party and include the following certification:

"I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information

are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Act, and 18 U.S.C. §§ 1001 and 1341."

This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

54. The reporting requirements of this Consent Decree do not relieve INEOS of any reporting obligations required by the CAA, EPCRA, or CERCLA, or their implementing regulations, or by any other federal, State, or local law, regulation, permit, or other requirement.

55. Any information provided pursuant to this Consent Decree may be used by the United States and/or the State of Ohio in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

VIII. STIPULATED PENALTIES

56. Defendants shall be liable for stipulated penalties to the United States and the State for violations of this Consent Decree as specified below, unless excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Decree, including any work plan or schedule approved under this Decree, according to all applicable requirements of this Decree and within the specified time schedules established by or approved under this Decree. The stipulated penalties set forth in Paragraphs 58 to 61 shall be applicable to INEOS, but not LANXESS. For purposes of Section VIII (Stipulated Penalties), "day" shall mean a calendar day, and "Day" shall have the meaning assigned in Paragraph 8.c.

57. Late Payment of Civil Penalty. If Defendants fail to pay the civil penalty required to be paid under Section IV of this Decree (Civil Penalty) when due, Defendants shall pay a stipulated penalty of $5,000 per day for each day that the payment is late. Defendants shall be jointly and severally liable for payment of such stipulated penalties for late payment of the civil penalty.

58. Enhanced LDAR Program ("ELP"). The following stipulated penalties shall accrue per violation per day unless otherwise specified below, for each violation of a requirement of the ELP as set forth in Section VI of this Consent Decree (Compliance Requirements) and Appendix A as specified below:

a. Failure to develop a timely and complete written facility-wide LDAR Program Plan under Paragraph 3 of Appendix A: $3,500 per week of noncompliance.

b. Failure to timely monitor in accord with Part B (when more frequent periodic monitoring is required) of Appendix A of any Covered Equipment: $100 per component per day but no more than $10,000 per month per Covered Process Unit.

c. Failure to conduct monitoring and inspections in accord with Part C or D of Appendix A: $100 per component per day but no more than $10,000 per month per Covered Process Unit.

d. Failure to conduct repair of leaks or otherwise comply with leak repair requirements in accord with Parts E and F of Appendix A: $200 per leak per day of noncompliance.

e. Failure to timely prepare the Equipment Improvement/Replacement Program and timely update the Program, and timely submit the Program Report as required under Part G of Appendix A: $15,000 per month of noncompliance.

f. Failure to timely replace equipment as required under Part G of Appendix A: $3,000 per piece of LDAR covered equipment per day.

g. Failure to incorporate the equipment changes identified in the Facility-wide Management of Change protocol in accord with Part H of Appendix A, failure to implement training in accord with Part I of Appendix A, and failure to comply with the requirements of Part J of Appendix A: $10,000 per violation per month of noncompliance.

h. Failure to complete the requirements of Part K (LDAR Audits and Corrective Action) in accord with the requirements of Appendix A: $7,500 per violation per month of noncompliance.

59. Flare and Flare Monitoring Instruments Requirements. The following stipulated penalties shall accrue per violation per day for each violation of a requirement for the Flare and Flare Monitoring Instruments as set forth in Section VI of this Consent Decree (Compliance Requirements):

a. Exceedance of maximum steam-to-Vent Gas ratio pursuant to Paragraph 18.a of this Consent Decree:

Penalty Per Violation Per Day	Daily Maximum Penalty	Period of Noncompliance
$1, 000	$3,000	1st through 30th day
$2,000	$6,000	31st through 60th day
$5,000	$15,000	61st day and beyond

b. Failure to meet minimum Net Heating Value pursuant to Paragraph 18.b of this Consent Decree:

Penalty Per Violation Per Day	Daily Maximum Penalty	Period of Noncompliance
$1,000	$3,000	1st through 30th day

$2,000	$6,000	31st through 60th day
$5,000	$15,000	61st day and beyond

c. Failure to meet new minimum NHVFG at any time thirty (30) days after the new NHVFG has been established by the Director of Air Enforcement pursuant to Paragraph 24 of this Consent Decree:

Penalty Per Violation Per Day	Daily Maximum Penalty	Period of Noncompliance
$1,000	$3,000	1st through 30th day
$2,000	$6,000	31st through 60th day
$5,000	$15,000	61st day and beyond

d. Failure to submit the Flare Monitoring SOP required under Section VI (Compliance Requirements) in a timely fashion, in accord with the requirements for that SOP, or failure to comply with approved SOP:

Penalty Per Violation Per Day	Period of Noncompliance
$1,000	1st through 14th day
$2,000	15th through 30th day
$5,000	31st day and beyond

e. For any one (1) hour Block Averaging period, INEOS shall only be liable for one stipulated penalty for violations of subparagraphs a., b., and c. above, provided that such penalty shall accrue at the highest level determined under subparagraphs a., b., or c.

60. Main Duct SOP. The following stipulated penalties shall accrue per violation per day for failure to submit Main Duct SOP required under Section VI of this Consent Decree (Compliance Requirements) in a timely fashion, in accord with the requirements for that SOP, or failure to comply with approved SOP:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,000	15th through 30th day
$2,500	31st day and beyond

61. Miscellaneous Monitoring and Reporting Requirements. The following stipulated penalties shall accrue per violation per day for each violation of a requirement related to the following Monitoring and Reporting requirements:

a. Failure to comply or failure to comply in a timely manner with Flare Monitoring Requirements set forth in Paragraphs 20 and 22:

Penalty Per Violation Per Day	Maximum Daily Penalty	Period of Noncompliance
$1,000	$2,000	1st through 30th day
$2,000	$4,000	31st through 60th day
$5,000	$10,000	61st day and beyond

b. Reporting Requirements. Failure to comply or failure to comply in a timely manner with the reporting requirements of Section VII of this Consent Decree (Reporting Requirements):

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$750	15th through 30th day
$1,200	31st day and beyond

c. CERCLA/EPCRA Requirements. Failure to comply or failure to comply in a timely manner with the requirements of Section VI (Compliance Requirements) relating to CERCLA/EPCRA set forth in Paragraphs 40 to 48:

Penalty Per Violation Per Day	Period of Noncompliance
$400	1st through 14th day
$750	15th through 30th day
$3,000	31st day and beyond

d. Acrylonitrile Emissions Control Projects. Failure to comply with the requirements of the Acrylonitrile Emissions Control Projects within the times set forth in Section VI (Compliance Requirements) and failure to meet operating parameters established pursuant to Paragraph 28:

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$750	15th through 30th day
$1,500	31st day and beyond

The following stipulated penalties shall accrue per violation per day for INEOS' failure to comply with any requirement, not specifically referenced in Paragraphs 58 to 61 above, of this Consent Decree or of any plan or schedule approved under this Consent Decree, within the specified time established by or approved under this Decree:

Penalty Per Violation Per Day	Period of Noncompliance
$350	1st through 14th day
$500	15th through 30th day
$1250	31st day and beyond

e. Permitting Application Requirements. The following stipulated penalties shall accrue per violation per Day for failure to submit timely and complete permit applications

and take all other actions necessary to obtain permits and approvals in accord with Paragraphs 35 (Permits) and 36 (Incorporating Consent Decree Requirements Into Permits):

Penalty Per Violation Per Day	Period of Noncompliance
$500	1st through 14th day
$1,500	15th through 30th day
$3,000	31st day and beyond

62. Stipulated penalties under this Section shall begin to accrue on the day after performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Except as otherwise specifically limited herein, stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

63. Defendants shall pay stipulated penalties to the United States and the State within forty-five (45) Days of a written demand by either Plaintiff. Defendants shall pay fifty (50) percent of the total stipulated penalty amount due to the United States and fifty (50) percent to the State. The Plaintiff making a demand for payment of a stipulated penalty shall simultaneously send a copy of the demand to the other Plaintiffs.

64. By no later than forty-five (45) Days after receiving a demand for stipulated penalties, INEOS may dispute liability for any or all stipulated penalties demanded by invoking the dispute resolution procedures of Section X (Dispute Resolution).

65. Either Plaintiff may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due it under this Consent Decree.

66. Stipulated penalties shall continue to accrue as provided in Paragraph 62, during any Dispute Resolution, but need not be paid until the following:

a. If the dispute is resolved by agreement or by a decision of U.S. EPA or the State that is not appealed to the Court, Defendants shall pay accrued penalties determined to be owing, together with interest, to the United States or the State within forty-five (45) Days of the effective date of the agreement or the receipt of EPA's or the State's decision or order.

b. If the dispute is appealed to the Court and the United States or the State prevails in whole or in part, Defendants shall pay all accrued penalties determined by the Court to be owing, together with interest, within sixty (60) Days of receiving the Court's decision or order, except as provided in subparagraph c below.

c. If any Party appeals the District Court's decision, Defendants shall pay all accrued penalties determined to be owing, together with interest, within thirty (30) Days of receiving the final appellate court decision.

67. Defendants shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 10 and Section XIV (Notices), except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.

68. Defendants shall pay stipulated penalties owing to the State in the manner set forth in and with the confirmation notices required by Paragraph 12 and Section XIV (Notices), except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid and shall include a reference to "A.G. EAGO No. 304160."

69. If Defendants fail to pay stipulated penalties according to the terms of this Consent Decree, Defendants shall be liable for interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be

construed to limit the United States or the State from seeking any remedy otherwise provided by law for Defendants' failure to pay any stipulated penalties.

70. Subject to the provisions of Section XII of this Consent Decree (Effect of Settlement/Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States or the State for Defendants' violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of relevant statutory or regulatory requirements, Defendants shall be allowed a credit, for any stipulated penalties paid, against any statutory penalties imposed for such violation.

IX. FORCE MAJEURE

71. "Force majeure," for purposes of this Consent Decree, is defined as any event arising from causes beyond the control of INEOS, of any entity controlled by INEOS, or of INEOS' contractors, that delays or prevents the performance of any obligation under this Consent Decree despite INEOS' best efforts to fulfill the obligation. The requirement that INEOS exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any such event (a) as it is occurring and (b) after it has occurred to prevent or minimize any resulting delay to the greatest extent possible. "Force Majeure" does not include INEOS' financial inability to perform any obligation under this Consent Decree. While the State does not agree that such a defense exists, it is agreed by the State, the United States, and INEOS that it is premature at this time to raise and adjudicate the existence of such a defense and that the appropriate point at which to adjudicate the existence of such a defense is at the time the dispute resolution provisions of Section X of this Consent Decree (Dispute Resolution) have been invoked.

72. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, INEOS shall provide notice orally or by electronic or facsimile transmission to U.S. EPA and the State, pursuant to Section XIV (Notices), within seventy-two (72) hours of when INEOS first knew that the event might cause a delay. Within seven (7) Days thereafter, INEOS shall provide in writing to U.S. EPA and the State an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; INEOS' rationale for attributing such delay to a force majeure event if it intends to assert such a claim. INEOS shall include with any notice all available documentation supporting the claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude INEOS from asserting any claim of force majeure for that event for the period of time of such failure to comply, and for any additional delay caused by such failure. INEOS shall be deemed to know of any circumstance of which INEOS, any entity controlled by INEOS, or INEOS' contractors knew or should have known.

73. If U.S. EPA, after a reasonable opportunity for review and comment by the State, agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by U.S. EPA, after a reasonable opportunity for review and comment by the State, for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. U.S. EPA will notify INEOS in writing of the

length of the extension, if any, for performance of the obligations affected by the force majeure event.

74. If U.S. EPA, after a reasonable opportunity for review and comment by the State, does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, U.S. EPA will notify INEOS in writing of its decision.

75. If INEOS elects to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), it shall do so no later than thirty (30) Days after receipt of U.S. EPA's notice. In any such proceeding, INEOS shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that INEOS complied with the requirements of Paragraphs 72 and 73 above. If INEOS carries this burden, the delay at issue shall be deemed not to be a violation by INEOS of the affected obligation of this Consent Decree identified to U.S. EPA and the Court.

X. DISPUTE RESOLUTION

76. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. INEOS' failure to seek resolution of a dispute under this Section shall preclude INEOS from raising any such issue as a defense to an action by the United States or the State to enforce any obligation of INEOS arising under this Decree.

77. Informal Dispute Resolution. Any dispute subject to Dispute Resolution under this Consent Decree shall first be the subject of informal negotiations. The dispute shall be considered to have arisen when INEOS sends the United States and the State a written Notice of

Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed twenty (20) Days from the date the dispute arises, unless that period is modified by written agreement. If the Parties cannot resolve a dispute by informal negotiations, then the position advanced by the United States, after consultation with the State, shall be considered binding unless, within twenty (20) Days after the conclusion of the informal negotiation period, INEOS invokes formal dispute resolution procedures as set forth below.

78. Formal Dispute Resolution. INEOS shall invoke formal dispute resolution procedures, within the time period provided in the preceding Paragraph, by serving on the United States and the State a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting INEOS' position and any supporting documentation relied upon by INEOS.

79. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of INEOS' Statement of Position. The United States' Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on INEOS, unless INEOS files a motion for judicial review of the dispute in accordance with the following Paragraph.

80. INEOS may seek judicial review of the dispute by filing with the Court and serving on the United States and the State, in accordance with Section XIV of this Consent Decree (Notices), a motion requesting judicial resolution of the dispute. The motion must be filed within ten (10) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of INEOS' position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and

shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

81. The United States, after consultation with the State, shall respond to INEOS' motion within the time period allowed by the Local Rules of this Court. INEOS may file a reply memorandum, to the extent permitted by the Local Rules.

82. Standard of Review

a. In a formal dispute resolution proceeding under this Section, INEOS shall bear the burden of demonstrating that its position complies with this Consent Decree and the CAA. The Court shall decide the dispute based upon applicable principles of law. The United States and the State reserve the right to argue that its position is reviewable only on the administrative record and must be upheld unless arbitrary and capricious or otherwise not in accordance with law. Any disputes regarding the Director of Air Enforcement's decision setting an NHVFG value pursuant to Paragraph 24 shall be reviewed based upon an administrative record in accordance with applicable principles of law.

83. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of INEOS under this Consent Decree, unless and until final resolution of the dispute so provides. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 66. If INEOS does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties).

XI. INFORMATION COLLECTION AND RETENTION

84. The United States, the State, and their representatives, including attorneys, contractors, and consultants, shall have the right of entry into any facility covered by this Consent Decree, at all reasonable times, upon presentation of credentials, to:

a. monitor the progress of activities required under this Consent Decree;

b. verify any data or information submitted to the United States or the State in accordance with the terms of this Consent Decree;

c. obtain samples and, upon request, splits of any samples taken by INEOS or its contractors or consultants;

d. obtain documentary evidence, including photographs and similar data; and

e. assess INEOS' compliance with this Consent Decree.

85. Upon request, INEOS shall provide U.S. EPA and the State or their authorized representative splits of any samples taken by INEOS. Upon request, U.S. EPA and the State shall provide INEOS splits of any samples taken by U.S. EPA or the State.

86. Until four years after the termination of this Consent Decree, INEOS shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to INEOS' performance of its obligations under this Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by the United

States or the State, INEOS shall provide copies of any documents, records, or other information required to be maintained under this Paragraph.

87. At the conclusion of the information-retention period provided in the preceding Paragraph, INEOS shall notify the United States and the State at least ninety (90) days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph and, upon request by the United States or the State, INEOS shall deliver any such documents, records, or other information to EPA or the State. INEOS may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If INEOS asserts such a privilege, it shall provide the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of each author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by INEOS. However, no documents, records, or other information created or generated pursuant to the requirements of this Consent Decree shall be withheld on grounds of privilege.

88. INEOS may also assert that information required to be provided under this Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to any information that INEOS seeks to protect as CBI, INEOS shall follow the procedures set forth in 40 C.F.R. Part 2.

89. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States or the State pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of

INEOS to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

90. This Consent Decree resolves the civil liability of Defendants to the United States and the State for the violations alleged in the Complaint filed in this action through the date of lodging of this Consent Decree with the Court.

91. Ohio EPA has alleged that Defendants have caused and/or are causing a public health nuisance in the Addyston, Ohio area based upon a risk assessment for acrylonitrile and 1,3-butadiene using U.S. EPA's Integrated Risk Information System ("IRIS").

92. The Defendants have challenged the risk assessment assumptions and methodology used by Ohio EPA, the risk conclusions reached by Ohio EPA, and whether the most current risk studies were considered by Ohio EPA. Ohio EPA and Defendants agree as follows:

a. Without any party being deemed to have made any admission of fact or law, it is agreed that INEOS shall implement the following measures to further reduce acrylonitrile and 1,3-butadiene emissions.

b. INEOS shall undertake the actions set forth in Paragraphs 27 through 31 of this Consent Decree to further reduce emissions of acrylonitrile; and

c. INEOS shall undertake the actions set forth in Paragraphs 18 through 25 of this Consent Decree to improve the operating efficiency of the P001 Process and further reduce 1,3-butadiene emissions.

93. Compliance with Paragraphs 18 through 31 regarding injunctive relief will resolve the public nuisance claim brought by the State of Ohio against Defendants for the

duration of the Consent Decree provided that the requirements set forth in Paragraphs 92.b. and 92.c. above are completed in accordance with the Consent Decree and thereafter operated in compliance with the requirements of the Consent Decree.

94. The United States and the State reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree, except as expressly stated in Paragraph 90 and, as to the State, Paragraphs 90 through 93. This Consent Decree shall not be construed to limit the rights of the United States or the State to obtain penalties or injunctive relief under the CAA, EPCRA, CERCLA, or Chapters 3704 and 3750 of the Ohio Revised Code, or implementing regulations, or under other federal or State laws, regulations, or permit conditions, except as expressly specified in Paragraph 90 as to the United States and Paragraphs 90 through 93 with respect to the State. The United States and the State further reserve all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, the Facility, whether related to the violations addressed in this Consent Decree or otherwise.

95. In any subsequent administrative or judicial proceeding initiated by the United States or the State for injunctive relief, civil penalties, other appropriate relief relating to the Facility or INEOS' violations, INEOS shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State in the subsequent proceeding were or should have been brought in the instant case, except with respect to claims that have been specifically resolved pursuant to Paragraph 90 of this Section as to the United States and Paragraphs 90 through 93 of this Section with respect to the State. While the State does not agree that any such defenses exist

with regard to the public nuisance claim, the State and Defendants agree that it is premature to raise and adjudicate the existence of any such defenses based upon any subsequent claims of public nuisance raised by the State.

96. This Consent Decree is not a permit, or a modification of any permit, under any federal, State, or local laws or regulations. INEOS is responsible for achieving and maintaining complete compliance with all applicable federal, State, and local laws, regulations, and permits; and INEOS' compliance with this Consent Decree shall be no defense to any action commenced pursuant to any such laws, regulations, or permits, except as set forth herein. The United States and the State do not, by their consent to the Effective Date of this Consent Decree, warrant or aver in any manner that INEOS' compliance with any aspect of this Consent Decree will result in compliance with provisions of the CAA, CERCLA, or EPCRA, or with any other provisions of federal, State, or local laws, regulations, or permits.

97. This Consent Decree does not limit or affect the rights of Defendants or of the United States or the State against any third parties, not party to this Consent Decree, nor does it limit the rights of third parties, not party to this Consent Decree, against Defendants, except as otherwise provided by law.

98. This Consent Decree shall not be construed to create rights in, or grant any cause of action to, any third party not party to this Consent Decree.

XIII. COSTS

99. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States and the State shall be entitled to collect the costs (including attorneys' fees) incurred in any action necessary to collect any portion of the civil penalty or any stipulated penalties due but not paid by Defendants.

XIV. NOTICES

100. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

To the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
Box 7611 Ben Franklin Station
Washington, D.C. 20044-7611
Re: DOJ No. 90-5-2-1-09264

and

Compliance Tracker, AE-17J
Air Enforcement and Compliance
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Mark J. Palermo
Associate Regional Counsel
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

To EPA:

Compliance Tracker, AE-17J
Air Enforcement and Compliance
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

and

Mark J. Palermo
Associate Regional Counsel
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

To the State:

Ohio Environmental Protection Agency
Division of Air Pollution Control
50 W. Town Street
Suite 700
Columbus, Ohio 43215
Attention: Thomas Kalman

Ohio Attorney General's Office
Environmental Enforcement Section
30 East Broad Street, 25th Floor
Columbus, Ohio 43215
Attention: Gregg Bachmann

Hamilton County Department
of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219
Attention: Mike Kramer

To Defendant INEOS ABS:

Clinton A. Herring
Site Director
356 Three Rivers Parkway
Addyston, Ohio 45001

Kenneth Schmidt
Safety, Health, Environmental and Quality Manager
356 Three Rivers Parkway
Addyston, Ohio 45001

Chester R. Babst
Babst, Calland, Clements and Zomnir, P.C.
2 Gateway Center, 8th Floor
Pittsburgh, PA 15222

To Defendant LANXESS Corporation:

Anne H. Lewis
Senior Counsel
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112

Chester R. Babst
Babst, Calland, Clements and Zomnir, P.C.
2 Gateway Center, 8th Floor
Pittsburgh, PA 15222

101. Any Party may, by written notice to the other Parties, change its designated notice recipient or notice address provided above.

102. Notices submitted pursuant to this Section shall be deemed submitted upon mailing, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.

XV. EFFECTIVE DATE

103. The Effective Date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court or a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket.

XVI. RETENTION OF JURISDICTION

104. The Court shall retain jurisdiction over this case until termination of this Consent Decree, for the purpose of resolving disputes arising under this Decree or entering orders modifying this Decree, pursuant to Sections X (Dispute Resolution) and XVIII (Termination), or effectuating or enforcing compliance with the terms of this Decree.

XVII. MODIFICATION

105. The terms of this Consent Decree, including any attached appendix, may be modified only by a subsequent written agreement signed by all the Parties, except that

modifications to Section VI (Compliance Requirements) or the Appendices do not require the consent of LANXESS. Where the modification constitutes a material change to this Decree, it shall be effective only upon approval by the Court.

106. Any disputes concerning modification of this Decree shall be resolved pursuant to Section X of this Decree (Dispute Resolution), provided, however, that, instead of the burden of proof provided by Paragraph 82, the Party seeking the modification bears the burden of demonstrating that it is entitled to the requested modification in accordance with Federal Rule of Civil Procedure 60(b).

XVIII. TERMINATION

107. INEOS may serve upon the United States and the State a Request for Termination of all requirements relating to Section VI (Compliance Requirements) except those contained in Paragraph 34 (Enhanced Leak Detection and Repair), when the following requirements have been met:

a. INEOS has maintained continuous satisfactory compliance with the Title V Permit, complied with all requirements relating to Section VI (Compliance Requirements), and operated the Biofilter Project for a period of at least eighteen (18) months following completion of installation;

b. INEOS has obtained Title V permits and federally enforceable permits or SIP amendments: (i) as required by the terms of this Consent Decree; and (ii) that include as enforceable permit terms all requirements specified in Paragraph 36 (Incorporating Consent Decree Requirements Into Permits); and

c. Defendants have paid the civil penalty and any accrued stipulated penalties demanded by the United States or the State as required by this Consent Decree.

d. The Request for Termination shall state that INEOS has satisfied the above requirements, together with all necessary supporting documentation.

108. After INEOS has maintained continuous satisfactory compliance with the LDAR requirements contained in Paragraph 34 (Enhanced Leak Detection and Repair), Appendix A and the associated LDAR requirements contained in this Consent Decree for a period of five (5) years after the Effective Date of this Consent Decree, has paid any stipulated penalties demanded by the United States or the State as required by this Consent Decree, and has satisfied the requirements in Paragraph 107 above, INEOS may serve upon the United States and the State a Request for Termination of the Consent Decree stating that INEOS has satisfied the above requirements, together with all necessary supporting documentation.

109. After payment of the civil penalty pursuant to Section IV (Civil Penalty) and stipulated penalties pursuant to Paragraph 57, LANXESS may serve upon the United States and the State a Request for Termination, stating that LANXESS has satisfied the above requirements, together with all necessary supporting documents.

110. Following receipt by the United States and the State of either Defendant's Request for Termination, the Parties shall confer informally concerning the Request for Termination and any disagreement that the Parties may have as to whether that Defendant has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States, after consultation with the State, agrees that the Decree may be terminated as to that Defendant, the relevant Defendant, the United States, and Ohio shall submit, for the Court's approval, a joint stipulation terminating the Decree as to that Defendant.

111. If the United States, after consultation with the State, does not agree that the Decree may be terminated, Defendants may invoke Dispute Resolution under Section X of this

Decree (Dispute Resolution). However, Defendants shall not seek Dispute Resolution of any dispute regarding termination, under Paragraph 78 of Section X (Dispute Resolution), until forty-five (45) Days after service of its Request for Termination.

XIX. PUBLIC PARTICIPATION

112. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Defendants consent to entry of this Consent Decree without further notice and agree not to withdraw from or oppose the entry of this Consent Decree by the Court or to challenge any provision of the Decree, unless the United States has notified Defendants in writing that it no longer supports entry of the Decree.

XX. SIGNATORIES/SERVICE

113. Each undersigned representative of Defendants and other parties to the Decree and the Assistant Attorney General or the Acting Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

114. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Defendants agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXI. INTEGRATION

115. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Decree and supersedes all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. No other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Decree or the settlement it represents, nor shall it be used in construing the terms of this Decree.

XXII. FINAL JUDGMENT

116. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States, the State of Ohio, and Defendants. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXIII. APPENDICES

117. The following appendix is attached to and part of this Consent Decree: "Appendix A" is the Enhanced Leak Detection and Repair Program.

Dated and entered this 3rd Day of February, 2010.

UNITED STATES DISTRICT JUDGE
SOUTHERN DISTRICT OF OHIO

FOR PLAINTIFF UNITED STATES OF AMERICA:

Date 1/19/10

Ignacia S. Moreno
Assistant Attorney General
Environment and Natural Resources Division
U.S. Department of Justice
10th & Pennsylvania Avenue, N.W.
Washington, DC 20530

Date 1/19/10

Catherine Banerjee Rojko
Senior Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044
(202) 514-5315
(202) 514-0097 (fax)

FOR PLAINTIFF UNITED STATES OF AMERICA:

Carter M. Stewart
United States Attorney
Southern District of Ohio
221 East Fourth Street
Suite 400
Cincinnati, Ohio 45202

Gerald F. Kaminski
(Bar No. 0012532)
Assistant United States Attorney
221 East Fourth Street
Suite 400
Cincinnati, Ohio 45202

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

Date 1/14/10

Bharat Mathur
Acting Regional Administrator
Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Mail Code: R-19J
Chicago, IL 60604-3507

Date 1-13-10

Robert A. Kaplan
Regional Counsel
Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Mail Code: C-14J
Chicago, IL 60604-3507

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

Date 1/15/10

Cynthia Giles
Assistant Administrator
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave, N.W.
Washington, DC 20460

Date 1/15/10

Pamela J. Mazakas
Acting Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave, N.W.
Washington, DC 20460

FOR THE STATE OF OHIO:

Richard Cordray
Ohio Attorney General

Date Dec 3, 2009

Gregg H. Bachmann
Assistant Attorney General
Environmental Enforcement Section
30 E. Broad St., 25th Floor
Columbus, Ohio 43215-2766

FOR DEFENDANT LANXESS CORPORATION:

Date 12-3-09

Randall S. Dearth
President and CEO of LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112

FOR DEFENDANT INEOS ABS (USA) CORPORATION:

Date 12/3/09

Clinton A. Herring
Managing Director, INEOS ABS (USA) Corporation
356 Three Rivers Parkway
Addyston, Ohio 45001

Appendix A
Enhanced LDAR Program

Definitions:

1. The definitions set forth in the Consent Decree shall apply for purposes of this Appendix A. For purposes of this Appendix A to the Consent Decree, the following definitions shall also apply:

   a. "Certified Low-Leaking Valves" shall mean valves for which a manufacturer has issued either: (i) a written guarantee that the valve will not leak above 100 parts per million (ppm) for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

   b. "Certified Low-Leaking Valve Packing Technology" shall mean valve packing technology for which a manufacturer has issued either: (i) a written guarantee that the valve packing technology will not leak above 100 ppm for five years; or (ii) a written guarantee, certification or equivalent documentation that the valve packing technology has been tested pursuant to generally-accepted good engineering practices and has been found to be leaking at no greater than 100 ppm.

   c. "Covered Equipment" shall mean all pumps, agitators, open-ended valves or lines, valves, and connectors, in light liquid, heavy liquid, or gas/vapor service that are regulated under a federal, state, or local leak detection and repair program in all Covered Process Units.

   d. "Covered Process Units" shall mean any process unit subject to the equipment leak provisions of 40 CFR Part 63, Subpart JJJ, Subpart FFFF or Subpart H, which at the time of lodging of the Consent Decree include process units P001, P004, P015, P021, P022, P042, P047 and P048.

   e. "DOR" shall mean Delay of Repair.

   f. "ELP" shall mean the Enhanced Leak Detection and Repair Program specified in this Appendix A.

   g. "First Maintenance Shutdown" shall mean the first shutdown of a Covered Process Unit that occurs no sooner than eighteen months after the Effective Date of this Consent Decree and either is done for the purpose of scheduled maintenance or lasts longer than 14 calendar days.

h. "LDAR" shall mean Leak Detection and Repair.

i. "LDAR Audit Commencement Date" or "Commencement of an LDAR Audit" shall mean the first day of the on-site inspection that accompanies an LDAR audit.

j. "LDAR Audit Completion Date" or "Completion of an LDAR Audit" shall mean one hundred twenty (120) calendar Days after the LDAR Audit Commencement Date.

k. "Maintenance Shutdown" shall mean a shutdown of a Covered Process Unit that either is done for the purpose of scheduled maintenance or lasts longer than 14 calendar days.

l. "Method 21" shall mean the test method found at 40 C.F.R. Part 60, Appendix A, Method 21.

m. "OEL" or "Open-Ended Line" shall mean any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

n. "Quasi-Directed Maintenance" shall mean the utilization of monitoring (or other method that indicates the relative size of the leak) within the next business day of each attempt at repair of a leaking piece of equipment to achieve the best repair/lowest emission rate possible.

o. "Screening Value" shall mean the highest emission level that is recorded at each piece of equipment as it is monitored in compliance with Method 21.

Part A: General

2. The requirements of the ELP shall apply to all Covered Equipment, except that the requirements of Paragraphs 3 and 33 shall apply to all equipment at the Facility that is regulated under any federal, state, or local LDAR program. The requirements of this ELP are in addition to, and not in lieu of, the requirements of any federal, state or local LDAR regulation that may be applicable to a piece of Covered Equipment. If there is a conflict between a federal, state or local LDAR regulation and this ELP, INEOS shall follow whichever regulation is more stringent.

3. By no later than ninety (90) Days after the Effective Date of this Consent Decree, INEOS shall develop a written facility-wide LDAR Program Plan that describes: (i) its facility-wide LDAR program (e.g., applicability of regulations to process units and/or specific equipment; leak definitions; monitoring frequencies); (ii) a tracking program (e.g., Management of Change) that ensures that new pieces of equipment added to the Facility for any reason are integrated into the LDAR program and that pieces of equipment that are taken out of service are removed from the LDAR program; (iii) the roles and responsibilities of all employee and

contractor personnel assigned to LDAR functions at the Facility; (iv) how the number of personnel dedicated to LDAR functions is sufficient to satisfy the requirements of the LDAR program; and (v) how the Facility plans to implement this ELP. INEOS shall review this document on an annual basis and update it as needed by no later than December 31 of each year, beginning December 31, 2010.

Part B: Monitoring Frequency

4. By no later than ninety (90) Days after the Effective Date of the Consent Decree, for all Covered Equipment except for that in heavy liquid service, INEOS shall comply with the following periodic monitoring frequencies, unless more frequent monitoring is required by federal, state, or local laws or regulations:

   a. Valves – Quarterly
   b. Connectors – Annually
   c. Pumps/Agitators – Monthly
   d. Open-Ended Lines (monitoring will be done at the closure device) – Quarterly

   Monitoring shall not be required for pumps that are seal-less or that are equipped with a dual mechanical seal system that complies with the requirements of 40 C.F.R. § 63.163(e).

5. Equipment that Has Been Replaced or Repacked pursuant to Part G. For equipment that has been replaced or repacked pursuant to Part G, INEOS may monitor such equipment at the frequency required by the most stringent regulation that applies to the piece of equipment. If any such piece of equipment is found to be leaking, INEOS shall monitor that piece of equipment monthly until the piece of equipment shows no leaks above the action levels in Table 1 of Part D for twelve consecutive months, at which time INEOS may commence monitoring at the frequency for that type of equipment set forth in either Paragraph 4 or Subparagraph 6.a.

6. Alternative Monitoring Frequencies for Valves, Connectors, and Open-Ended Lines after Two Years. At any time after two consecutive years of monitoring valves, open-ended lines, and connectors pursuant to the requirements of Paragraph 4, INEOS may elect to comply with the monitoring requirements set forth in this Paragraph by notifying U.S. EPA and the State no later than three months prior to commencing the monitoring under this Paragraph. INEOS may elect to comply with the monitoring requirements of this Paragraph at one or more than one Covered Process Unit but may not make this election for anything less than all pieces of the same type of Covered Equipment (*i.e.*, valves, connectors or open-ended lines) in each Covered Process Unit. If INEOS elects to comply with the monitoring requirements of this Paragraph 6, INEOS shall comply with the requirements of both Subparagraphs 6.a and 6.b; INEOS cannot elect to comply with Subparagraph 6.a and not 6.b.

   a. For valves, connectors, and open-ended lines that have not leaked at any time for at least two consecutive years of monitoring. For valves, connectors, and

open-ended lines that have not leaked at any time for at least the two years prior to electing this alternative, INEOS shall monitor valves and open-ended lines one time per year and shall monitor connectors one time every two years. If any leaks are detected during this alternative monitoring schedule or during an LDAR audit or a federal, state or local audit or inspection, INEOS shall immediately start monitoring pursuant to the requirements of Subparagraph 6.b.

b. For valves, connectors, and open-ended lines that have leaked at any time in the prior two years of monitoring. For valves, connectors, and open-ended lines that have leaked at any time in the prior two years of monitoring, INEOS shall monitor each piece of equipment monthly until the piece of equipment shows no leaks for twelve consecutive months, at which time INEOS may commence monitoring at the frequency for that type of equipment set forth in Subparagraph 6.a.

Part C: Monitoring Methods and Equipment

7. By no later than ninety (90) Days after the Effective Date of this Consent Decree, for all Covered Equipment except for connectors, and by no later than one-hundred twenty (120) days after the Effective Date of this Consent Decree for connectors, INEOS shall comply with Method 21 in performing LDAR monitoring, using a Toxic Vapor Analyzer 1000B Flame Ionization Detector (FID) attached to a data logger, or equivalent equipment, which directly electronically records the Screening Value detected at each piece of equipment, the date and time that each Screening Value is taken, and the identification numbers of the monitoring instrument and technician. INEOS shall transfer this monitoring data to an electronic database on at least a weekly basis for recordkeeping purposes.

8. INEOS shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas and in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21. In addition, INEOS shall conduct calibration drift assessment re-checks of the LDAR monitoring equipment before each monitoring shift and with one such re-check at the end of each monitoring shift. The calibration drift assessment shall be conducted using a calibration gas with a concentration approximately equal to the applicable internal leak definition. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, INEOS shall re-monitor all components that had a reading greater than 250 ppm. INEOS shall follow this same procedure if it is necessary to turn off the LDAR monitoring equipment for any reason during a monitoring shift. INEOS shall retain all calibration records for at least one year.

Part D: Leak Detection and Repair Action Levels

9. INEOS shall identify leaks through both Method 21 monitoring and audio, visual, and olfactory sensing inspections.

10. By no later than ninety (90) Days after the Effective Date of this Consent Decree, for all leaks detected at or above the leak repair action levels listed in Table 1 for a specific equipment type, INEOS shall perform repairs in accordance with Paragraphs 12 - 15 of this ELP.

Table 1: Leak Repair Action Levels by Equipment Type

Equipment Type	Lower Leak Definition (ppm)
Valves	250
Connectors	250
Pumps	500
Agitators	2000
OELs (at the Closure Device)	250

11. By no later than ninety (90) Days after the Effective Date of the Consent Decree, for all Covered Equipment, at any time, including outside of periodic monitoring, that a leak is detected through audio, visual, or olfactory sensing, INEOS must repair the piece of Covered Equipment in accordance with all applicable regulations and with Paragraphs 12 - 15 of this ELP.

Part E: Leak Repairs

12. By no later than five (5) Days after detecting a leak, INEOS shall perform a first attempt at repair. By no later than fifteen (15) Days after detection, INEOS shall perform a final attempt at repair or may place the piece of equipment on the Delay of Repair list provided that INEOS has complied with all applicable regulations and with the requirements of Paragraphs 13 – 15 and 17.

13. INEOS shall perform Quasi-Directed Maintenance during all repair attempts.

14. For leaking valves (other than control valves), when other repair attempts have proven ineffective and/or INEOS is not able to remove the leaking valve from service, INEOS shall use the drill-and-tap repair method prior to placing the leaking valve on the DOR list unless there is a major safety, mechanical, product quality, or environmental issue with repairing the valve using this method. INEOS shall document the reason(s) why any drill and tap repair was (were) not performed prior to placing any valve on the DOR list. INEOS shall attempt at least two drill-and-tap repairs before placing a valve on the DOR list, unless a valve has been identified as a major safety risk pursuant to this paragraph.

15. For each leak, INEOS shall record the following information: the date of all repair attempts; the repair methods used during each repair attempt; the date, time and Screening Values for all re-monitoring events; and, if relevant, the information required under Paragraph 14 and 17 for Covered Equipment placed on the DOR list.

16. Nothing in Paragraphs 12 - 15 is intended to prevent INEOS from taking a leaking piece of Covered Equipment out of service; provided however, that prior to placing the leaking piece of Covered Equipment back in service, INEOS must repair the leak or must comply with the requirements of Part F (Delay of Repair) to place the piece of Covered Equipment on the DOR list.

Part F: Delay of Repair

17. By no later than thirty (30) Days after the Effective Date of this Consent Decree, for all Covered Equipment placed on the DOR list, INEOS shall require the following:

a. Sign-off from the plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant engineering management that the piece of Covered Equipment is technically infeasible to repair without a process unit shutdown; and

b. Periodic monitoring, at the frequency required for other pieces of Covered Equipment of that type in the process unit, of the Covered Equipment placed on the DOR list.

Part G: Equipment Replacement/Improvement Program

18. Commencing no later than nine (9) months after the Effective Date of this Consent Decree and continuing until termination, INEOS shall implement the program set forth in Paragraphs 19 to 23 to replace and/or improve the emissions performance of the valves and connectors in each Covered Process Unit.

19. Valves

a. List of all Valves in the Covered Process Units. By no later than 30 days after the Effective Date of this Consent Decree, INEOS shall submit to EPA and the State a list of all valves in each Covered Process Unit that are in existence as of the Effective Date. The valves on this list shall be the "Existing Valves" for purposes of this Paragraph 19.

b. Installing New Valves. Except as provided in Paragraph 20, INEOS shall ensure that each new valve that it installs in any Covered Process Unit either is a Certified Low-Leaking Valve or is fitted with Certified Low-Leaking Valve Packing Technology.

c. Replacing or Repacking Existing Valves that have Screening Values At or Above 250 ppm. Except as provided in Paragraph 20, for each Existing Valve in each Covered Process Unit that has a Screening Value at or above 250 ppm during any monitoring event, INEOS shall replace or repack the Existing Valve with a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. INEOS shall undertake this replacement or repacking by no later than 30 days after the monitoring event that triggers the replacement or repacking requirement, unless the replacement or repacking requires a process unit shutdown. If the replacement or repacking requires a process unit shutdown, INEOS shall undertake the replacement or repacking during the First Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or repack the valve. If INEOS completes the replacement or repacking within 30 days of detecting the leak, INEOS shall not be required to comply with Part E of this Appendix A. If INEOS does not complete the replacement or repacking within 30 days, or if, at the time of the leak detection, INEOS reasonably can anticipate that it might not be able to complete the replacement or repacking within 30 days, INEOS shall comply with all applicable requirements of Part E.

d. Replacing or Repacking Existing Valves that have Screening Values between 100 ppm and 250 ppm.

   i. First Time. Except as provided in Paragraph 20, for each Covered Process Unit, prior to the First Maintenance Shutdown, INEOS shall generate a list of all Existing Valves that had Screening Values between 100 ppm and 250 ppm during any monitoring event that took place between the Effective Date of this Consent Decree and the last calendar quarter prior to the First Maintenance Shutdown. INEOS shall prioritize the list to the extent possible in descending order from worse leaks (at the top) to least worse leaks (at the bottom). Any Existing Valve that leaked two or more times shall be placed higher on the list than any Existing Valve that leaked only once. INEOS shall replace or repack with either Certified Low-Leaking Valves or with Certified Low-Leaking Valve Packing Technology the lesser of: (A) all Existing Valves on the list; or (B) the number of Existing Valves that results from solving the equation set forth below for "V_{TBRR}" ("Valves To Be Repacked or Replaced"). If (B) applies, INEOS shall replace or repack the Existing Valves starting at the top of the list and proceeding downward. If the equation set forth below yields a fraction, the results shall be rounded to the nearest whole number and fractions above 0.50 shall be rounded up.

$V_{TBRR} = 0.10 \times (V_T - V_{DOR} - V_{PRR} - V_{PR})$

Where:

V_{TBRR}: Existing Valves that have leaked between 100 ppm and 250 ppm and are to be replaced or repacked at the Maintenance Shutdown with either Certified Low-Leaking Valves or with Certified Low-Leaking Valve Packing Technology

V_T: Total Existing Valves in Covered Process Unit at the time of the Maintenance Shutdown

V_{DOR}: Existing Valve(s) on Delay of Repair list that are to be repacked or replaced at the Maintenance Shutdown

V_{PRR}: Existing Valve(s) that has (have) been previously replaced or repacked with either Certified Low-Leaking Valves or with Certified Low-Leaking Valve Packing Technology

V_{PR}: Existing Valve(s) that is (are) pending repair (*i.e.*, replacement or repacking) prior to the Maintenance Shutdown

ii. Replacements or Repackings during Subsequent Maintenance Shutdowns. Except as provided in Paragraph 20, INEOS shall comply with the requirements of Paragraph 19.d.i, at each Maintenance Shutdown of each Covered Process Unit. In order to generate the list of Existing Valves that leak between 100 ppm and 250 ppm for these subsequent Maintenance Shutdowns, INEOS shall utilize the Screening Values of the monitoring events that took place between the last Maintenance Shutdown and the last calendar quarter prior to the current Maintenance Shutdown.

iii. Valve Elimination Program (Optional).

(A) For each Covered Process Unit, by no later than three (3) months prior to the First Maintenance Shutdown, INEOS may submit to EPA for review and comment a proposal to eliminate Existing Valves in organic hazardous air pollutant (HAP) service for the exclusive purpose of eliminating possible HAP emissions ("Valve Elimination Proposal"). "Eliminating" Existing Valves in organic HAP service shall mean the physical removal of the interface where potential fugitive HAP emissions may occur while simultaneously not creating another fugitive emission point. INEOS may utilize as a credit toward the number of Existing Valves it must repack or replace (*i.e.*, "V_{TBRR}") all Existing Valves that it proposes for elimination. INEOS must thereafter permanently eliminate those Existing Valves from service during the First Maintenance Shutdown of each Covered

Process Unit. If the number of Existing Valves proposed for elimination and actually eliminated during the First Maintenance Shutdown exceeds the number of valves required to be replaced or repacked during the First Maintenance Shutdown, INEOS may take credit for those Existing Valves in the replacements or repackings that are required in the subsequent Maintenance Shutdowns pursuant to Paragraph 19.d.ii.

(B) INEOS may propose for elimination only those Existing Valves that it will eliminate for the exclusive purpose of reducing possible HAP emissions. Valve eliminations resulting from equipment or process unit changes that INEOS otherwise would undertake for any other reason may not be utilized for purposes of this Subparagraph 19.d.iii.

(C) EPA does not, by its review of INEOS' Valve Elimination Proposal and/or its failure to comment on INEOS' Valve Elimination Proposal, warrant or aver in any manner that INEOS' elimination of any Existing Valves conforms to the requirements of Subparagraph 19.d.iii (A) or (B). INEOS remains exclusively responsible for complying with those requirements.

20. Commercial Unavailability of a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology. INEOS shall not be required to utilize a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology to replace or repack a valve if a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology is commercially unavailable. Prior to claiming this commercial unavailability exemption, INEOS must contact a reasonable number of vendors of valves and obtain a written representation or equivalent documentation from each vendor that the particular valve that INEOS needs is commercially unavailable either as a Certified Low-Leaking Valve or with Certified Low-Leaking Valve Packing Technology. In the Compliance Status Reports due under Part N of this Appendix A, INEOS shall: (i) identify each valve for which it could not comply with the requirement to replace or repack the valve with a Certified Low-Leaking Valve or Certified Low-Leaking Valve Packing Technology; (ii) identify the vendors it contacted to determine the unavailability of such a Valve or Packing Technology; and (iii) include the written representations or documentation that INEOS secured from each vendor regarding the unavailability.

21. Records of Certified Low-Leaking Valves and Certified Low-Leaking Valve Packing Technology. Prior to installing any Certified Low-Leaking Valves or Certified Low-Leaking Valve Packing Technology, INEOS shall secure from each manufacturer documentation that demonstrates that the proposed valve or packing technology meets the definition of "Certified Low-Leaking Valve" and/or "Certified Low-Leaking Valve Packing Technology." INEOS shall retain that

documentation for the duration of this Consent Decree and make it available upon request.

22. Connectors

a. Connector Replacement and Improvement Descriptions. For purposes of this Paragraph 22, for each of the following types of connectors, the following type of replacement or improvement shall apply:

Connector Type	Replacement or Improvement Description
Flanged	Replacement or improvement of the gasket
Threaded	Replacement of the connector
Compression	Replacement of the connector
CamLock	Replacement or improvement of the gasket
Quick Connect	Replacement or improvement of the gasket, if applicable, or replacement of the connector if there is no gasket
Any type	Elimination (*e.g.*, through welding, pipe replacement, etc.)

b. Installing New Connectors. In installing any new connector in a Covered Process Unit, INEOS shall use best efforts to install a connector that is least likely to leak, using good engineering judgment, for the service and operating conditions that the connector is in.

c. Replacing or Improving Connectors. For each connector that, two out of three consecutive monitoring periods has a Screening Value at or above 250 ppm, INEOS shall replace or improve the connector in accordance with the applicable replacement or improvement described in Subparagraph 22.a. INEOS shall use best efforts to install a replacement or improvement that will be the least likely to leak, using good engineering judgment, for the service and operating conditions that the connector is in. INEOS shall undertake the replacement or improvement within 30 days after the monitoring event that triggers the replacement or improvement, except where the replacement or upgrade requires a process unit shutdown. If the replacement or improvement requires a process unit shutdown, INEOS shall undertake the replacement or improvement during the first Maintenance Shutdown that follows the monitoring event that triggers the requirement to replace or improve the connector. If INEOS completes the replacement or repacking within 30 days of detecting the leak, INEOS shall not be required to comply with Part E of this Appendix A. If INEOS does not complete the replacement or repacking within 30 days, or if, at the time of the leak detection, INEOS reasonably can anticipate that it might not be able to complete the replacement or repacking

within 30 days, INEOS shall comply with all applicable requirements of Part E.

23. Equipment Replacement/Improvement Report. In each Compliance Status Report due under Appendix A, Part N, INEOS shall include a separate section in the Report that: (i) describes the actions it took to comply with this Part G, including identifying each piece of equipment that was replaced or upgraded; and (ii) identifies the schedule for any future replacements or upgrades.

Part H: Management of Change

24. Management of Change: INEOS shall ensure that each piece of equipment added to the Facility or removed from the Facility for any reason is evaluated to determine if it is or was subject to LDAR requirements and that such pieces of equipment are integrated into or removed from the LDAR program.

Part I: Training

25. By no later than six (6) months after the Effective Date of the Consent Decree, INEOS shall have ensured that all employees and contractors responsible for LDAR monitoring, maintenance of LDAR equipment, LDAR repairs, and/or any other duties generated by the LDAR program have completed training on all aspects of LDAR that are relevant to the person's duties. By that same time, INEOS shall develop a training protocol to ensure that refresher training is performed once per calendar year and that new personnel are sufficiently trained prior to any involvement in the LDAR program.

Part J: Quality Assurance ("QA")/Quality Control ("QC")

26. Daily Certification by Monitoring Technicians. Commencing by no later than three (3) months after the Effective Date of this Consent Decree, on each day that monitoring occurs, at the end of such monitoring, INEOS shall ensure that each monitoring technician certifies that the data collected represents the monitoring performed for that day by requiring the monitoring technician to sign a form that includes the following certification:

> On [insert date], I reviewed the monitoring data that I collected today and that to the best of my knowledge and belief, the data accurately represents the monitoring I performed today.

In lieu of a form for each technician for each day of monitoring, a log sheet may be created that includes the certification that the monitoring technicians would date and sign each day that the technician collects data.

27. Commencing by no later than the first full calendar quarter after the Effective Date of this Consent Decree, during each calendar quarter, at unannounced times, an LDAR-trained employee of INEOS, who does not serve as an LDAR monitoring technician on a routine basis, shall undertake the following:

a. No less than once per quarter, review whether any pieces of equipment that are required to be in the LDAR program are not included;

b. No less than once per quarter, verify that equipment was monitored at the appropriate frequency;

c. No less than once per quarter, verify that proper documentation and sign-offs have been recorded for all equipment placed on the shutdown or DOR list;

d. No less than once per quarter, ensure that repairs have been performed within the required timeframe;

e. No less than once per quarter, review monitoring data and equipment counts (e.g., number of pieces of equipment monitored per Day) for feasibility and unusual trends;

f. No less than once per quarter, verify that proper calibration records and monitoring instrument maintenance information are stored and maintained;

g. No less than once per quarter, verify that other LDAR program records are maintained as required; and

h. No less than once per quarter per monitoring technician, observe LDAR monitoring technicians in the field to ensure monitoring is being conducted as required.

INEOS shall correct any deficiencies detected or observed as soon as practicable. INEOS shall maintain a log that: (i) records the date and time that the reviews, verifications, and observations required by this Paragraph were undertaken; and (ii) describes the nature and timing of any corrective actions taken.

Part K: LDAR Audits and Corrective Action

28. INEOS shall conduct LDAR audits pursuant to the schedule in Paragraph 29 and the requirements of Paragraph 30. INEOS shall retain a third-party with experience in conducting LDAR audits to conduct no less than the initial audit and follow-up audits every two (2) years until termination of the Consent Decree. To perform the third-party audit, INEOS shall select a different company than its regular LDAR contractor. At its discretion, in years in which INEOS is not required to retain a third-party auditor, INEOS may conduct the audit internally by using its own personnel, provided that the personnel INEOS uses are not employed at the facility being audited but rather are employed centrally or at one or more other INEOS facilities. All such internal audits must be conducted by personnel familiar with regulatory LDAR requirements and this ELP.

29. Until termination of this Consent Decree, INEOS shall ensure that an LDAR audit at the Facility is conducted every twelve (12) months in accordance with the following schedule: for the first LDAR audit at the Facility, the LDAR Audit

Commencement Date shall be no later than ninety (90) Days after the Effective Date of this Consent Decree. For each subsequent LDAR audit, the LDAR Audit Completion Date shall occur within the same calendar quarter that the first LDAR Audit Completion Date occurred.

30. Each LDAR audit shall include but not be limited to reviewing compliance with all applicable regulations, reviewing and/or verifying the same items that are required to be reviewed and/or verified in Paragraph 27, and performing the following activities:

a. Calculating a Comparative Monitoring Audit Leak Percentage. Covered Equipment shall be monitored to calculate a leak percentage for each Covered Process Unit broken down by equipment type (*i.e.,* valves, pumps, agitators, connectors, and OELs at the closure device). The monitoring that takes place during the audit shall be called "comparative monitoring" and the leak percentages derived from the comparative monitoring shall be called the "Comparative Monitoring Audit Leak Percentage." Until termination of this Consent Decree, INEOS shall conduct a comparative monitoring audit pursuant to this Paragraph of at least three (3) Covered Process Units during each LDAR audit. Each Covered Process Unit at the facility that is not the subject of the current audit shall have a comparative monitoring audit at least once before a previously-audited Covered Process Unit is audited again. The first comparative monitoring audit shall include at least two (2) of the following Covered Process Units: P001; P004; P042; or P047.

b. Calculating the Historic, Average Leak Percentage from Prior Periodic Monitoring Events. For the Covered Process Unit that is audited, the historic average leak percentage from prior monitoring events, broken down by equipment type (*i.e.*, valves, pumps, agitators, connectors, and OELs at the closure device) shall be calculated. The following number of complete monitoring periods immediately preceding the comparative monitoring audit shall be used for this purpose: valves - 2 periods; pumps and agitators - 12 periods; connectors - 1 period; and open-ended lines - 2 periods.

c. Calculating the Comparative Monitoring Leak Ratio. For the Covered Process Unit that is audited, the ratio of the comparative monitoring audit leak percentage from Paragraph 30.a to the historic average leak percentage from Paragraph 30.b shall be calculated. If a calculated ratio yields an infinite result, INEOS shall assume one leaking piece of equipment was found in the process unit through its routine monitoring during the 12-month period before the audit, and the ratio shall be recalculated.

In the first LDAR audit, INEOS shall not be required to undertake comparative monitoring on OELs or calculate a comparative monitoring leak ratio for OELs because of the unavailability of historic, average leak percentages for OELs. In addition to these items, LDAR audits after the first audit shall include reviewing the Facility's compliance with this ELP.

31. When More Frequent Periodic Monitoring is Required. If a comparative monitoring audit leak percentage calculated pursuant to Paragraph 30.a triggers a more frequent monitoring schedule under any applicable federal, state, or local law or regulation than the frequencies listed in Part B – that is either Paragraph 4, 5, or 6 – for the equipment type in that Covered Process Unit, INEOS shall monitor the affected type of equipment at the greater frequency unless and until less frequent monitoring is again allowed under the specific federal, state, or local law or regulation. At no time may INEOS monitor at intervals less frequently than those in the applicable Paragraph in Part B.

32. Corrective Action Plan.

a. Requirements of a CAP. By no later than 30 days after each LDAR Audit Completion Date, INEOS shall develop a preliminary corrective action plan ("CAP") if the results of an LDAR audit identify any deficiencies or if the Comparative Monitoring Leak Ratio calculated pursuant to Subparagraph 30.c is 3.0 or higher. The CAP shall describe the actions that INEOS shall take to correct the deficiencies and/or the systemic causes of a Comparative Monitoring Leak Ratio that is 3.0 or higher. The CAP also shall include a schedule by which those actions shall be undertaken. INEOS shall complete each corrective action as expeditiously as possible with the goal of completing each action within 90 days after the LDAR Audit Completion Date. If any action is not completed or is not expected to be completed within 90 days after the LDAR Audit Completion Date, INEOS shall explain the reasons in the final CAP to be submitted under Subparagraph 32.b, together with a proposed schedule for completion of the action(s) as expeditiously as practicable.

b. Submissions of the CAP to EPA. By no later than 120 days after the LDAR Audit Completion Date, INEOS shall submit the final CAP to EPA, together with a certification of the completion of corrective action(s). For any corrective actions requiring more than 90 days to complete, INEOS shall include an explanation together with a proposed schedule for completion as expeditiously as practicable.

c. Approval/Disapproval of All or Parts of a CAP.

i. Unless within 60 days after receipt of the CAP, EPA disapproves of all or part of a CAP's proposed actions and/or schedules, the CAP shall be deemed approved.

ii. By no later than 60 days after receipt of INEOS' CAP, EPA may disapprove any or all aspects of the CAP. Each item that is not specifically disapproved shall be deemed approved. Except for good cause, EPA may not disapprove of any action within the CAP that already has been completed. Within 45 days of receipt of any disapproval from EPA, INEOS shall submit a revised CAP that addresses the deficiencies that EPA identified. INEOS shall implement the revised CAP either pursuant to the schedule that EPA

proposed, or, if EPA did not so specify, as expeditiously as practicable.

iii. A dispute arising with respect to any aspect of a CAP shall be resolved in accordance with the dispute resolution provisions of this Decree.

Part L: Certification of Compliance

33. Within 180 days after the initial LDAR Audit Completion Date, INEOS shall submit a certification to EPA and the State that: (i) the Facility is in compliance with all applicable LDAR regulations and this ELP; (ii) INEOS has completed all corrective actions, if applicable, or is in the process of completing all corrective actions pursuant to a CAP; and (iii) all equipment at the Facility that is regulated under any federal, state, or local leak detection program has been identified and included in the Facility's LDAR program.

Part M: Recordkeeping

34. INEOS shall keep all original records, including copies of all LDAR audits, to document compliance with the requirements of this ELP in accordance with Section XI of this Consent Decree. All monitoring data, leak repair data, training records, and audits will be retained for five (5) years, except for the calibration records (including calibration drift assessments) which will be retained for one (1) year. Upon request by EPA, INEOS shall make all such documents available to EPA and shall provide, in their original electronic format, all LDAR monitoring data generated during the life of this Consent Decree.

Part N: Reporting

35. Compliance Status Reports. On the dates and for the time periods set forth in Paragraph 36, INEOS shall submit, in the manner set forth in Section XIV (Notices) of the Consent Decree, a compliance status report regarding compliance with this ELP. The compliance status report shall include the following information:

a. The number of personnel assigned to LDAR functions at the Facility and the percentage of time each person dedicated to performing his/her LDAR functions;

b. An identification and description of any non-compliance with the requirements of Appendix A;

c. An identification of any problems encountered in complying with the requirements of Appendix A;

d. The information required in Appendix A, Paragraph 20;

e. A description of any LDAR training required in accordance with Appendix A, Part I of this Consent Decree;

f. Any deviations identified in the QA/QC performed under Appendix A, Part J, as well as any corrective actions taken under that Part;

g. A summary of LDAR audit results including specifically identifying all deficiencies; and

h. The status of all actions under any CAP that was submitted pursuant to Part K of Appendix A during the reporting period.

36. Due Dates. The first compliance status report shall be due thirty-one (31) days after the first full half-year after the Date of Entry of this Consent Decree (*i.e.*, either: (i) January 31 of the year after the Date of Entry, if the Date of Entry is between January 1 and June 30 of the preceding year; or (ii) July 31 of the year after the Date of Entry, if the Date of Entry is between July 1 and December 31). The initial report shall cover the period between the Date of Entry and the first full half year after the Date of Entry (a "half year" runs between January 1 and June 30 and between July 1 and December 31). Until termination of this Decree, each subsequent report will be due on the same date in the following year and shall cover the prior two half years (*i.e.*, either January 1 to December 31 or July 1 to June 30).

37. Each compliance status report submitted under this Part shall be signed by the plant manager, a corporate official responsible for environmental management and compliance, or a corporate official responsible for plant engineering management, and shall include the following certification:

> I certify under penalty of law that I have examined and am familiar with the information in the enclosed document(s), including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(3) of the Clean Air Act and 18 U.S.C. Sections 1001 and 1341.